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THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

CXXVIII—No. 4286 MARCH 27, 1925.

THE STEEL HOUSE

IT has been observed that most of the discussions upon the steel house invariably centre round the questions of whether the houses are satisfactory and are a solution of the housing problem. There are many other issues to this fresh development in housing, and it is easy and usual for all of us to feel that our own point of view represents an important aspect which, we think, is being neglected. As Mr. Wells puts it, we are apt to think "in little pieces that lie about loose." The whole difficulty lies in being fair to the problem and to ourselves.

A schoolboy's essay on the subject would reveal a simple philosophy. Right and wrong assume definite value to him, and he is not ashamed of revealing his mind. Many people take a pride in declaring that they are Philistines, while others are deaf to any reasoning which might label them with this stigma. We admit that it is difficult to discuss the future of the steel house in an attitude of detached and ruthless scrutiny, regardless of what our neighbours think of us. We approach the subject in an attitude of mind shared by many, believing that anyone with the slightest regard for the amenities of our country must admit it is a tragedy that our traditional methods of building have failed us in a time of great stress. But having admitted this, we recognise that the real significance of the steel house represents a development which is far beyond our little likes and dislikes. The development was almost certain to arise under existing conditions; the opportunity was there and the circumstances were favourable. The public has assumed a critical attitude these days when houses have to be provided by the State; consequently, it is difficult to sort out our wants from our longings, and our ideals from the immediate circumstances.

It is inevitable that the general attitude towards the steel house should be governed by the different views held upon the housing shortage. To many it presents a glorious opportunity to develop our housing ideals; to others, it is coming to be regarded as something of a nuisance which must be tackled vigorously in a less critical spirit. Any proposals for revolutionising house building must therefore face a storm of hostile criticism, often confusing the end with the means, and it is evident there is plenty of scope for error of judgment in diagnosing the real value of any new development.

It is impossible to imagine that we could have been asked prior to the war to examine and criticise a steel house. The necessity did not exist, and new developments are born of necessity. The genesis of the steel house is purely a matter of political economy. There is an acute housing shortage; we cannot get a sufficient quantity built by the ordinary methods, and until the shortage is overtaken prices will remain high. It is perfectly reasonable and natural that building costs should be high when the demand is great, and though there has been much grumbling on the score, it was difficult to see any reasonable limit to the price we might be compelled to pay. We do not attempt to condemn or justify the policy of the building industry in this matter, beyond saying that in a free market and with no obligation on the State to build, the economic level of prices would have been settled long ago by the consumer. It is admitted by most authorities that the sooner rentals and building costs reach an economic level in relation to the general level of wages, the better will it be for the nation. When we cannot afford to pay an adequate rent for our houses, we are in an unhealthy state, and we realise the absurdity when workers in the building trade cannot afford the results of their own labour. The longer the housing shortage drags on the longer do we maintain a standard of high building costs, and complicate the economic position of the whole country.

There is a shortage of skilled labour in the building trade, and it will be many years, we understand, before this can be made good. This brings us to the crucial point, that the supply of houses under existing methods is insufficient, regardless of the price we are prepared to pay. Many critics have overlooked the point, believing that the supply of brick houses was merely a question of money. Houses built by new methods of construction do not, as a matter of fact, work out appreciably cheaper than brick houses, but it is the national supply of houses which is the important factor. We do not know whether the available resources of the existing building industry have been utilised to their utmost capacity. We are inclined to think not, in face of the fact that it has been obvious for some considerable time that attempts would be made to develop a type of house which would help to reduce the housing shortage, and at the same time employ unskilled labour which otherwise would be receiving the dole. Any scheme which calls into use new raw materials and new sources of labour to build houses (which are reasonably satisfactory) is doing more than one real service to the nation.

We do not agree with the theory which is now being advanced that the building trade could not continue to build in the old traditional methods, however excellent the tradition may be. Houses were cheap and plentiful in pre-war days; now they are dear and scarce. The national need for houses cannot be met by normal means for reasons which we have outlined, consequently we turn to alternative methods out of sheer necessity. This is the position as we see it. We do not look for remedies where there is nothing to cure. The future for this new type of house depends upon a number of factors. The building trade has to reckon with a new competitor prepared to challenge the principle of employing unskilled labour on houses. As we write we see that Lord Eustace Percy, speaking at Hastings, stated that the amount of school building now in prospect provides of itself a guarantee of employment for new entrants into the building industry for many years to come.

Where our architectural judgment is concerned we cannot allow ourselves to be deflected from perfect candour. We do not think the steel house is as pleasing as the house built in traditional materials, but we cannot in fairness balance this against the many economic advantages which the public stand to gain by increasing its sources of supply. The architectural qualities of the steel house (if such an expression can be permitted) is not of the highest order, but no one—the designers least of all—ever suggested that they were. There is this to be said, although it is a negative form of criticism, that the steel house we have seen is not nearly so bad as it might have been, and we feel fairly safe in saying that refinements in detail will come with greater experience. In discussing the steel house we have assumed that a number of experts are satisfied that the constructional and technical difficulties inherent in the materials have been successfully overcome.

Any criticism of a steel house would be inadequate without some reference to the question of the appearance of these houses in bulk. A stereotyped design spells monotony, and monotony exerts a deadening influence upon the mind. Modern civilisation has developed a routine of monotony which is difficult to avoid, and the inevitable reaction is everywhere to be seen in the search for relief. We hope, therefore, that the manufacturers of steel houses—or any other type of house—will bear in mind that standardisation and mass production are dangerous bed-fellows, and we must regard them as potential enemies if they end in a dull renunciation of the varied human activities and qualities which a nation expresses in its homes. The error can be avoided where there is an honest conviction that we are entitled to ask for the best, and where there is a firm determination that the best brains shall be exercised upon a refractory material.

NOTES.

Lord Curzon.

THE death of Lord Curzon of Kedlestone has deprived architecture of one of its most sympathetic and active friends. It is little short of astounding that a man who held so many posts of political responsibility should have found time to carry out an exhaustive survey of the historical monuments of India, and to preserve so much of the architectural heritage of England. The memoir in *The Times*, of March 21, does full justice to this facet of his many-sided character, and borrows the following apt quotation from Sir Thomas Raleigh, writing in 1906: "I never visited an ancient building in India without finding that the Viceroy had been there before me, measuring, verifying, planning out the details of repair and reconstruction, labouring to inspire his local subordinates with his own passionate reverence for the historic past." Such a tribute to a modern politician must be as unique as it is well deserved.

Money Lenders.

THESE gentlemen seem of late to have been giving particular attention to architects and surveyors whom they evidently imagine (not, perhaps, without cause) are likely to be in need of cash. For this reason architects will the more wholeheartedly wish success to Lord Carson's Bill that aims at limiting the activities of the fraternity. The matter may not, strictly speaking, concern architecture, but it certainly concerns architects, and we are sure that architects would be grateful to the R.I.B.A. if it would actively support any measure that aims at putting a stop to this nuisance.

The Preservation of our Cathedrals.

AN ecclesiastical Commission of special interest to architects has started active work this month. This is the Commission appointed by the Church Assembly of the Church of England to inquire into English Cathedrals. The Archbishop of York is the chairman, and Mr. Walter J. Tapper is on the Commission as a representative of architects, together with four Bishops, four Deans, and such distinguished persons as Lord Hugh Cecil, Sir Henry Newbolt and Dr. James of Eton. The Commission is to investigate the condition of the fabric of all the Cathedrals, and will conduct its inquiries by means of personal visits which will commence in the early part of the coming summer. The problem of the preservation of our Cathedrals is a matter of grave concern, and the methods of preservation are the subject of conflicting opinion. The views of the Commission on the question will be awaited with interest.

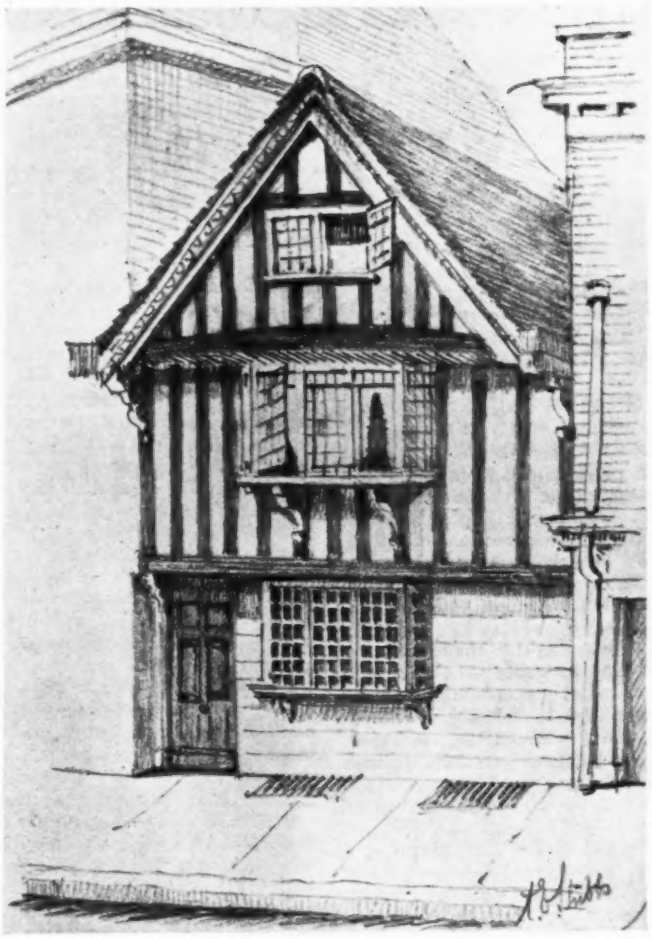
War Graves Commission Report.

THERE is a moving interest in the fifth annual report of the Imperial War Graves Commission, which presents us with a vivid and detailed account of the vast fields occupied by its work, which is described with a particularly becoming and touching appreciation of the nature of the undertaking and the way it is being carried out. The Report is, in fact, noteworthy for the spirit which animates it, and will appeal to the nation as so well expressing that which we desire should characterise its methods. The task is one no doubt needing considerable administrative ability for its responsible work, which under the able direction of Sir Fabian Ware has been so well conducted. It is not possible here to describe in detail the world-wide extent of its labours, the wide area across which these thousands of cemeteries are scattered, or to refer to the many considerations requiring much forethought and delicacy in dealing with the different religions represented which dictated various forms of sepulture, but it reflects much credit on the department which is thus building up this collective and enduring monument of the sacrifices of the great war.

Kenwood.

IT is satisfactory to know that as a result of the liberality of Lord Iveagh, the mansion and grounds, formerly occupied by Lord Mansfield and which the Kenwood Preservation Council found themselves unable to buy, will pass into the possession of the public at the end of ten years. It may even be hoped that the appreciation of this generous act will encourage the donor to an earlier date, seeing how much benefit to the public interests the gift entails, extending as it does far beyond Hampstead and Highgate. Instead of the property being cut up for building its beautiful character is now preserved to the public for ever. What has already been retained will shortly be opened, and when the remainder of the property is added to it, these beautiful park lands should form one of the most attractive resorts in the Metropolis.

Huddersfield Technical College War Memorial. (*See p.* 478.)
MR. ERNEST BOWER, M.S.A., Architect: Paintings by MR. J. R. GAULD, A.R.C.A.



A Sketch in Ashford, Kent. By the late Mr. A. E. Stubbs.

At the Architectural Association.

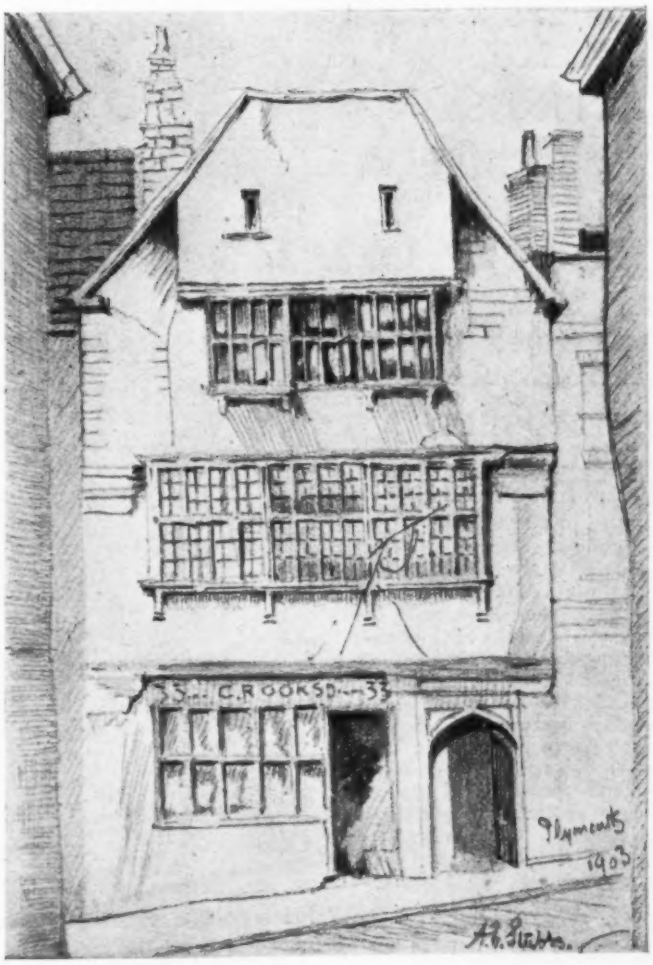
The success of a typical "A.A." evening depends less upon hard facts than upon stimulation, and Mr. Marriott's remarks, which are reported elsewhere, were admirably in tune with the mood demanded. Many tangent thoughts must have been provoked and debated unofficially, and his interesting historical sketch of the treatment by painters of architectural subjects in their pictures was an illuminating commentary on the workings of group mind and fashion. The Early Masters observed the architectural unities with punctilious nicety. They not only portrayed a door but the door with its particular details. It was a tribute to realism without reality, for as we know the other "unities" of date, place, and character were deliberately ignored. And yet the more we reflect upon the artistic paradox of realism, the more profound appears to be the saying of George Sand: "Art is not a study of positive reality, but the quest for ideal truth."

The Different Forms.

Mr. Marriott's contention that the average artist prefers a picturesque architectural inspiration or background rather than the finest contemporary work as a central subject appears, despite exceptions, to be indisputable. His explanation of the virtue of the picturesque and its dangerous reaction upon architecture might, one feels, have been carried even further. Architecture as an art exists independent of personal passion; she depicts neither love, jealousy, revenge, nor compassion; the consolations and aspirations of her humanism are magnificently abstract, and are not subject to facile association. Thus the pictorial artist, alive to the keen subtleties of his flexible medium, feels the impersonal impression unsympathetic, and if he cannot endow it with some exterior reaction of emotion, history, or atmosphere, it remains outside the province of his particular inspiration. This distinction between the various art forms and the value of their special technique was one of the most instructive points in a stimulating evening.

Architectural Education.

Mr. Howard Robertson, S.A.D.G., Principal of the Architectural Association School of Architecture (London), visited the Department of Architecture and Civic Design at the Technical College, Cardiff, on Friday last week, and gave the students an inspiring address on Architectural Education with special reference to the methods adopted in the Schoo' of the Architectural Association. An exhibition of work done in the London School had been arranged in the Assembly Hall, and this Mr. Robertson discussed critically with the Cardiff students, afterwards dealing similarly with an exhibition of the work of the Cardiff students.



Sketch in Plymouth. By the late Mr. A. E. Stubbs.

GENERAL NEWS

Professional Announcement.

Messrs. H. F. Murrell & R. M. Pigott, FF.R.I.B.A., have removed to 44, Bedford-row, W.C.1. Mr. E. W. Mountford, A.R.I.B.A., has removed to 44, Bedford-row, W.C.1.

Unification Royal Sanction.

The Royal sanction has now been given to the unification of the Royal Institute of British Architects and the Society of Architects. The supplementary charter making the fusion possible was signed on March 11, and already over 1,000 members of the Society have been transferred to membership with the Royal Institute.

Exhibition of Water Colours.

The International Exhibition of water colours, which was held at Milan in 1923, is to be repeated in the coming spring. The British section has been arranged under the presidency of Sir Herbert Hughes-Stanton, assisted by Mr. Selwyn Brinton. Among the artists contributing are G. Clausen, W. Russell Flint, Oliver Hall, W. Lee-Hankey, Cecil A. Hunt, Percy Lancaster, Moffatt Lindner, Ambrose McEvoy, James Paterson, Sir Herbert Hughes-Stanton, Hely Smith, and others.

St. Paul's Cathedral.

The Court of Common Council recently approved the report prepared by the Special Committee of the City Corporation with reference to the "dangerous structure" notice which was served on the Dean and Chapter of St. Paul's by the Corporation Surveyor.

The report, which we briefly mentioned in our last issue, accepts the proposals of the Cathedral's Commission of Experts, requires that the work of restoration shall be proceeded with speedily, and requests that those parts of the Cathedral affected by the work shall be closed to the public. The Court also accepted the resignation of Mr. John Todd, the official who served the "dangerous structure" notice, and who now wrote that "in view of the report of the Special Committee" the only course left to him was to resign.

MEETINGS

MONDAY, *March* 30.

Royal Institute of British Architects.—Professor A. Beresford Pite on "Architectural Treatment of Ferro-Concrete." At 9, Conduit-street, W.1. 8 p.m.

TUESDAY, *March* 31.

Liverpool Architectural Society.—Mr. C. Marriot on "The Future of Architecture."

Architecture Club.—Visit to St. Paul's Cathedral. 2 p.m.

HUDDERSFIELD TECHNICAL COLLEGE WAR MEMORIAL

THIS memorial (see p. 476) occupies a site at the head of the principal staircase on the first floor landing of the College, and was unveiled in September last by Sir William Raynor, and dedicated by the Venerable Archdeacon R. C. M. Harvey. The memorial consists of three mural paintings surmounting a scheme of oak panelling with a cenotaph in the centre. The paintings represent War, Death and Victory. In the centre painting three warriors appear before the figure of Victory. One is handing back a sword and another is waiting to be crowned. A bishop stands in one corner, and a prisoner of war, held captive by another warrior, is on the opposite side. On the oak cenotaph is a bronze tablet headed by the word "Peace," and bearing the inscription "For those who Fought and those who Fell." Above the inscription is the Huddersfield Coat of Arms, and below are roses, representing Yorkshire. The paintings are by Mr. J. R. Gauld, A.R.C.A., of Huddersfield, in collaboration with Mr. Ernest Bower, M.S.A., as architect for the scheme.

COMPETITION NEWS

Belfast Library.

The Belfast Corporation invite designs by architects in practice in Northern Ireland or their assistants, for a branch public library to be erected in the Shankill-road and Mountjoy-street, Belfast. Conditions can be had on application to the Secretary on payment of one guinea. Mr. James Cumming Wynnes, M.B.E., F.R.I.B.A., is the assessor. Sending-in day June 4.

Art and Commerce.

The Studio has inaugurated a competition for suggestions on "The Means of Strengthening the Relationship between Art and Commerce." Prizes: £25, £10, and £5. Further particulars from the Editor of *The Studio*.

Other Competitions.

Other competitions still open include the following (the dates given are, first the sending-in date, and second the issue of *The Builder* in which full particulars were given):—Industrial Designs (June 25; Dec. 26). Valetta Lay-out (June 30; Jan. 2). Argentine Institute (Dec. 31; Jan. 2). Offices at Nairobi (March 28; Jan. 23). Constantine College (May 15; Jan. 23). Stockbridge Baths (banned by the R.I.B.A., April 7; Feb. 6). Shuttering (May 31; Feb. 13). Geneva Conference Hall (no sending-in date). Copenhagen Bridge (Sept. 1; Feb. 20). National War Memorial (June 11; March 13). Norwich Extension (July 1). Dundee Secondary School (April 18).

"Winter": Newel Post.
Designed and Carved in Lime Tree Wood, by MR. ERIC AUMONIER.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

The Prix de Rome Competitions.

SIR,—I have read with great interest and pleasure your criticism of the various designs submitted in this competition, in last week's issue of your journal, and heartily agree with what you say regarding defectiveness of methods of modern teaching. The pleasure students derive from taking part in such competitions could be greatly enhanced if the problem in this case had applied to some definite town. The history of the town (military, civil, industrial) could then have been studied so that any enrichments, either heraldic or sculpturesque, could have some real allegorical and symbolical significance.

None of the four designs from Liverpool are gateways in any real sense of the word. The first illustrated might be an entrance for a railway station; the second, parts of a façade for an art gallery: the third is merely two isolated pylons; and the fourth part of a railway viaduct. The fifth, from architectural association, is effective and might be a gateway for an ideal town not yet built, but which we are all waiting for as a result of the great and much boomed Town Planning Institute's meetings and conferences. As a memorial gateway to a military town devastated during the war it is by no means unsuccessful.

The most pleasing and fully conceived of the designs submitted is No. 6, from Manchester, as it not only has a military aspect but has a happy relation of parts, although it is rather meagre in the use of sculpture. (It rather suggests York as a source of inspiration.) No. 7, also from Manchester, is defective in proportion, and is spoiled by the commonplace treatment of the parapet. No. 8, from London University, is more sculpturesque, but has no real unity of texture.

The sculpture section of the Prix de Rome competitions is distinctly disappointing, as the competitors seem to have no real understanding what unity between architecture and sculpture means. A study of Michael Angelo's Medici Chapel or Sansovino's Loggia at Venice would explain what real unity means. The figure panel in No. 1 is nicely composed, but the architecture is dreadful. In Nos. 2, 3 and 4 the architectural setting is not only amateurish, it is bad. They are reminiscent of various periods of Renaissance, but possess none of the perfections of scale, detail, or beauty of any of the best periods.

If the students are incapable of designing original doorways, why not let them copy a fine old example (such as we find at Genoa, Verona, or other Northern and Southern cities in Italy), and design new sculpture to fit the old doorway. There is certainly no real unity of decorative effect in any of the designs illustrated. Naturally, the ideal would be modern architecture with modern sculpture, but a student, while a student, can never go very far wrong if he adheres to sound traditional lines in such competitions. This can be done by any really intelligent student, without blatant copying, if he has been properly taught during his elementary course.

Scholarship always tells ultimately. The more original a student is in his ideas the greater value to him is a sound knowledge of the evolution of design in all departments of arts and crafts. I have not seen any reproductions of the paintings submitted in the Prix de Rome competitions, but if they are worse than the sculpture, then they must be very bad. Architecture is certainly ahead of sculpture and painting to-day, and it wants very little revision in the methods of teaching to lead to a great advance.

I certainly agree with you, sir, when you say that modern educative methods are, generally speaking, wrong.

Edinburgh. WILLIAM DAVIDSON.

A MAKER OF MONUMENTS

"Man Triumphant."
MR. DAVID EDSTROM, Sculptor.

BORN at Hvetlanda, in 1873, David Edstrom was taken from Sweden to the United States by his parents, when seven years old. There he lived the rough life in the Middle West, became a newsboy, a machinery cleaner, and a meat packer. As a meat packer he became enamoured of the naked or almost naked human frame as exhibited by the strong men in the packing yards. The play of their gleaming muscles made Edstrom an artist.

He returned to Sweden in the stoke-hold, where he pursued his study of anatomy, to become a sculptor. First he studied at the Polytechnic at Stockholm, and then at the Academy under Borjesson, the creator of the modern Swedish school of naturalistic sculpture, until 1900, when he went to Florence for two years at the Academia, and thence to Injalbert in Paris.

For twenty years he remained in Europe, making for himself a considerable reputation by exhibiting in most of the capitals. His bronzes and marbles are in the Swedish National Museum, the Gothenburg Museum, and in the Thiel Gallery at Stockholm, which includes his bronze portrait bust of Mr. Ernest Thiel, the founder of that celebrated collection.

Edstrom has made over fifty busts, and among his sitters have been Prince Gustav Adolph of Sweden, Princess Margaret of Connaught, and Princess Patricia. Private collectors in Italy, France, Germany, Austria, Holland, and England, acquired works of his. Suddenly he gave up his life in Europe and returned to America. He found, however, that he possessed a European, not to say English, mind, and one which had been at work on modern problems to some purpose. He had become a thinker as well as an artist, and he wanted to combine the two—his form of expression to be plastic. In 1904 he was awarded a silver medal at the

"Rhapsody" (in Bronze).
MR. DAVID EDSTROM, Sculptor.

Detail of War Memorial at Montreal.
MR. DAVID EDSTROM, Sculptor.

St. Louis World's Fair, and from that date began his real immersion in American life and affairs. The planning of cities interests him. The cause of Serbia during the war moved him to the production of a fine modelled relief.

His important works in the States include the Soldiers' Monument at the home of his boyhood, Ottumwa, Iowa, a fine cylindrical column with Ionic capital supporting a great bronze sphere with eagle, the square base bearing bronze panels depicting various figures of soldiers sculptured in homely fashion and indicating Edstrom's leaning towards realism. Another war memorial is at Montreal, unveiled by the Prince of Wales, a bronze relief of a squad of soldiers returning and bearing a wounded comrade, met by an angel of peace offering wreaths. Still another relief is "The Significance of the League of Nations," the lower part representing a family of mother, father and several children, delightfully modelled in the nude; above, a group of a dying woman attended by a child, with six symbolical female figures in a row, backed by a large angelic figure with outstretched wings and arms, the niche in which these groups is placed being arched and the face of it occupied by a long inscription, indicative of the artist's ideas concerning humanity.

Another phase of Edstrom's work is seen in the two seated figures of Isis and Nepthys with appropriate symbols, in marble, to flank the entrance to the Scottish Rite Temple of Masonry at Washington, D.C. It is very simple in treatment as befits the motive, and very stately in design. Another work with Egyptian motive is the Sphinx head, in which simplification has been carried further, and the planes formed with abruptly cut edges. Mounted on two cubes, this head forms a striking translation of an ancient theme into terms of modern thought and feeling.

Two single figures are important—one, in bronze, called "Rhapsody," a woman with thin drapery, cleverly modelled, head thrown back, hands holding the veil, which adds beauty to that of the body beneath it; the other, in marble, "Ophelia," a simple draped figure with flowers for adornment, at the moment when the girl is proceeding to her tragic fate. Another work in this category is "The Cliff," made in terra-cotta, and representing a male nude emerging from the clay, while reclining beneath is the figure of a woman. Several other imaginative works of a similar nature are "Clouds," "Fear," "Pride," and "Caliban."

"Sphinx" (in Black and Red Granite).

MR. DAVID EDSTROM, Sculptor.

"Isis": Figure for the Supreme Council of Scottish Rite, Washington.

MR. DAVID EDSTROM, Sculptor.

The artist's imaginative powers, however, are seen at their highest in his conception of "Man Triumphant," a great monument in which, having pondered long on the meaning of civilisation, Edstrom has rejected the Greek, and sets forth the American view of humanity. In order to do this, he has evoked a new vision in comparison with "The Laocoön." In the Greek work, the struggle ended in defeat; in this modern sculptural mind its end is triumph after struggle with the sinister forces that are ever ready to attack man in his path to the infinite. Like the makers of "The Laocoön," the sculptor has employed a great serpent to represent these forces, but instead of the father and sons in their mortal agony, he has modelled three young life-warriors, who confidently tackle the formidable task of subduing the powerful enemy. This forms the surmounting group of the monument, and is supported on a massive block, four square, with four groups of four draped women surmounting a corniced frieze, filled with figures, one more important than the rest standing out of the centre of the four faces on a separate pedestal. All these reliefs are symbolic of life—the imperatives indicated being "Thou Must," "I Must," "I Desire," "I Am"! The whole is carried on a massive series of steps. Ambition, vision and sculptural accomplishment are united in this extensive work, by which its author hopes to yield to the world the thoughts that have been seething in his mind for so many years.

Books Received.

THE FIRST VOLUME OF THE WREN SOCIETY, 1924: ST. PAUL'S CATHEDRAL. (Oxford: The University Press.)

REMEMBRANCER AND GUIDE TO THE HOUSING ACTS, 1890–1924. By R. C. Maxwell. (London: The Sanitary Publishing Co., Ltd.) Price 7s. 6d.

THE ART OF TOWN PLANNING. By H. V. Lanchester. (London: Chapman & Hall, Ltd.) Price 21s.

READING SOCIETY OF ARCHITECTS

THE fifth annual meeting of the Reading Society of Architects, which is the Berkshire branch of the Berks, Bucks, and Oxon Architectural Association, was held recently at University College, Reading. The attendance included:—Mr. H. Whiteman Rising, Mr. H. Hutt, Mrs. and Miss Hutt, Rev. P. H. Ditchfield, Rev. E. R. Hewett, Mr. W. Roland Howell, Mr. J. T. Saunders, Mr. C. B. Willcocks, Miss Willcocks, Mr. J. R. Greenaway, Mr. W. Wing, Mr. W. J. Freeman, Mr. and Mrs. G. R. Dowsett, Messrs. W. H. Allen, S. E. Burrett, A. T. Doe, A. Hearn, E. S. Smith, R. J. Eele, G. Batten, R. A. Froude, H. L. Creak, J. W. Turner, R. P. Walden, H. S. Gardener, etc.

The chair was taken by Mr. H. Whiteman Rising. Mr. C. B. Willcocks, hon. secretary, read the annual report, dealing with the work of the executive during the past year, in which it was stated that the total strength of the Society now is 104 members, made up as follows:—49 Fellows, 13 Associates, 23 Students, 8 Associated Craftsmen, and 11 hon. members. A discussion took place regarding the proposed change in the name of the society to the Berkshire Society of Architects in order to bring the society into line with the other two branch societies in the Three Counties Association, and it was decided to adopt the new title.

The following members were elected to form the executive committee for 1925:—Chairman, Mr. H. Hutt; vice-chairman, Mr. H. Whiteman Rising; hon. treasurer, Mr. W. R. Morris; hon. librarian, Mr. H. Whiteman Rising; hon. secretaries, Messrs. C. B. Willcocks and W. J. Freeman; hon. auditors, Messrs. A. S. Cox and E. P. Morgan; members, Messrs. W. Rowland Howell, W. Galt Miller, E. Ravenscroft, and H. W. Rogerson. The following were elected to serve as representatives of the society on the council of the Berks, Bucks and Oxon Architectural Association:—Messrs. E. P. Warren, W. Roland Howell, H. Whiteman Rising, F. H. Floyd, J. T. Saunders, C. B. Willcocks, and F. G. Sainsbury. Mr. H. Hutt was nominated for election as vice-president of the Berks, Bucks, and Oxon Architectural Association.

The meeting was followed by a lecture on "Manor Houses and Cottages," given by the Rev. P. H. Ditchfield (hon. member of the society), which was illustrated by numerous lantern slides. At the conclusion of the lecture a vote of thanks to Mr. Ditchfield was proposed by Mr. W. R. Howell and seconded by Mr. W. Wing.

THE ENGLISH HOUSE

THE domestic side of English mediæval architecture occupied the attention of Sir Banister Fletcher recently in his lecture at the Central School of Arts and Crafts. It was fascinating to follow the natural sequence in which the modern comfortable home had been derived from the stern Norman keep of feudal days. The castle, he said, was the child of the feudal system; the keep was the kernel of the castle, and the great hall was the chief feature of the keep. Originally this hall was shared by the noble lord with his family and the retainers. Then a room was added for his special use, called the solar, and kitchens with buttery and pantry at the other end of the hall behind the "screens." Afterwards the growth of the house evolved a quadrangular plan.

THE YOUNG ARCHITECT & THE HUMANITIES

We have received the following communication from Mr. James O'Hanlon Hughes, M.S.A., A.M.I.Struct.E.:—

We are told by those who are supposed to know that there is an awakening interest among the general public towards architecture and the architect. One can trace a certain inkling of these rumours to that latest centre of some kind of gravity—the Architecture Club—with its pleasant and useful admixture of distinguished dilettanti; some with pens sufficiently inspired to write up architecture for the daily papers. One dare not doubt the sincerity of the aim, nor the loftiness of motive which has inspired it. Nevertheless it has to an impartial observer just the suspicion of a stunt—that peculiar post-war mania for audacious and ephemeral novelty. Can it be that there is a kind of holy alliance between these super-architects and super-pressmen to write the already overwritten and overridden public into a frenzy over the subtlety of the modern street front?

The general public is notoriously tame towards those who have arrived in any art, just as it is sometimes cruelly brutal to aspiring genius. It may or may not be good for it to get its knowledge of architecture in tabloids of cutely-cut artificial stone to the designs of an eminent gentleman; with instructions as to how it should be swallowed, tastefully prepared by an honorary publicity agent. But is it good for architecture? Is it a healthy thing for architects? Most of all, is it likely to have a permanent effect? I do not think so.

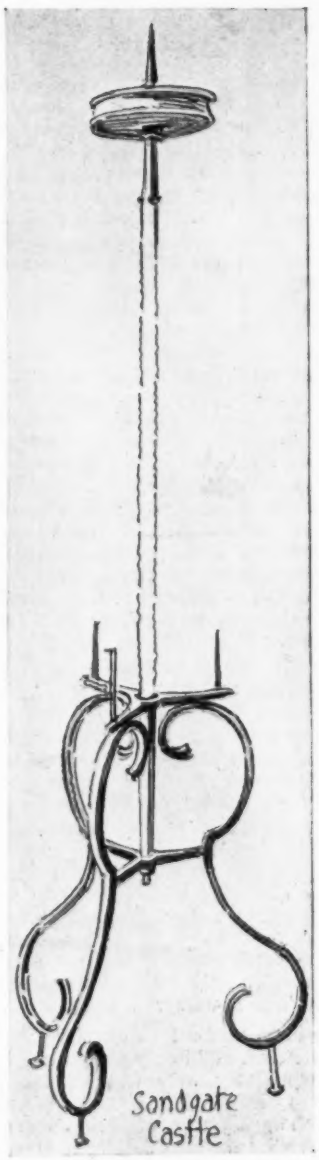
I cannot enthuse overmuch about the attitude of the general public. It is too nebulous to be of any value. I am, as a serious worker in an arduous art, more than suspicious of the general press. I am not at all sure that it represents the general public opinion, except in its advertisement columns, which tend to become more and more numerous and interesting. But I am very much concerned with the attitude of architects—as a young architect has a right to be—because it is that attitude, as I conceive it, that is so menacing the future—and forging the shackles which will bind the innocent and unwary to the tortuous wheels of decadence, something as frightful in anticipation as the soldier's field punishment of crucifixion. I wish I could be only mildly tolerant of the attitude of those whom I must not respectfully refer to as the "old gentlemen"—being still comparatively young myself. Their authoritative expression of opinions do not so much leave me cold as make me shiver. Their polite and dignified phrases, and not infrequent patting of each other on the back, seem to me at times to symbolise the last stages of a privileged and dignified, but no less senile, decay. A dying king is no less a dying man if he is laid out in a gilded chamber with an army of brilliant prescribing medicos in attendance and a swarm of mournful courtiers praying in the outer courts.

That is very much the position of modern architecture. The disease has gone too far for mere prescriptions. Some callous surgery is required; while the condition is such that even an anæsthetic may not be applied. The disease is one that characterises the first phase of the post-war era; and it is, perhaps, only natural that an art so human and vital as the one we profess should be smitten. It is simply fatigue. We are mentally and morally tired. Our nerves are gone to pieces. Mr. Belloc thinks we have lost, or are losing, the sense of proportion. Statesmen tell us that we are on the edge of a precipice very near to bankruptcy. It is on the edge of such a precipice, conceivably, our architectural students are going to realise their grandiose dreams that reveal a great deal of highly-strung imagination, and very little of that fundamental brainwork that is even more necessary in building than in poetry. Practical architects are engrossed in arguments about mere organisation, and the best means to distinguish themselves from their fellows, whether they be brother architects or persons who merely imagine they are brother architects, or just ordinary human beings who do not care what they are called so long as they are allowed to pursue their destinies unmenaced by the artificialities.

We are in an age that is suffering the extreme agonies of a painful self-consciousness. We are more engrossed in ourselves than in our work. Indeed, work for the young is becoming all the more hard to find because our narrowing and self-imposing limits are restricting our perspective, and therefore the scope of our activities. Ideals and the ideas they produce are being buried in a fog of pettiness and a struggle for a livelihood tending to become more and more caddish, however much we sugar the pill in politeness of phrase and convention of conduct. You may conceive a paper architecture by a cunning mixture of colour and water. Sound building demands nasty digging in the somewhat less congenial mud, and a painful contact time and again with the rugged forces of nature—human nature not the least.

There, if we will only cool our over-heated imaginations, not a little intoxicated in the first flush of a seeming deliverance from the despair of defeat, lies the problem in front of our noses. Buildings are urgently required. Building trade workers are walking the streets idly wondering when they are going to be allowed to start. Builders are falling over one another in their anxiety to pull off contracts, and fuming at the workers for setting limits to their terms—terms which lose the job to them both. Architects are waiting on them settling their disputes, and putting in the time in interminable arguments round the professional pump. Capitalists—meaning those who have the money to spend and naturally refuse to spend it unprofitably—calmly keep the safe locked until we get over these childish quarrels over the picking of their bone. Wages, prices, processes—three economic facts. Clients, builders, craftsmen—three human facts. While the young architect is dreaming over, and is being encouraged to dream over, all kinds of fantastic notions of design and composition, the play of these hard facts around him will eventually squeeze him out if he does not soon waken to the increasing menace of them. Let's get out of the hot, artificial air of the modern *ateliers* into the wide, open spaces of the workaday world and mix among our fellow-men. Architecture, if it is to be human and vital, must grow from the constant and sensitive study of life. The architect, as much as the novelist or the poet, must study the facts of life at first hand if he is to interpret his age to posterity in the endurable literature of stone, natural or artificial, or, at least, serve it usefully.

If the younger men do throw off the blinkers which have been imposed upon them, and are being imposed upon them, in their innocence, I am convinced that the future holds yet a glorious promise for them. But they will have to aspire to be men before they will even get a chance to be architects. The building problems of to-day call more for fundamental brainwork than merely brilliant design. They call as much for the better education in civics as in other things of the craftsmen as for the higher education of the architect. They call for a whole-hearted co-operation of all classes in the great industry of building to get the organism going smoothly again. They call for comradeship and faith and trust and courage. Life and the age is calling to us to come out of our narrow exclusive professionalism and take our place among the creative workers—artists or scientists—in propelling the age to a nobler dint than the selling and buying at greatly reduced prices in bargain sales of feverish recurrence of a shoddy-fashioned merchandise.



Tripod Candlestick at Sandgate Castle.

Don't let's be hoodwinked by such ephemeral discussions as the greater height of London buildings, for before that discussion has petered out the air menace of the next war may be upon us, and we shall be burrowing back to our cave-like ancestry in the bowels of the earth—only deeper—subject, of course, to the provisions of the L.C.C. formulated from the wisdom of past experience and the advice of the experts!

You see, life for us youngsters has become so gloriously uncertain, and all we know from our limited past experience is that the young will not be allowed to go beneath when the menace arrives. So be prepared. Our problems in life and art are "our" problems, and in an age of doubt and perplexity the platitudes of a tranquil past are sounding rather hollow. But we are still in their thrall, and the grip of their ancient tyranny lies heavy on our souls.

Only by a courageous effort to think for ourselves the solution of our own perplexing problems can be progress, and the craftsmen look to us as the true and natural leaders, and the age awakens to inspiration of our work. And the "puff pars" in the daily Press may then be plentiful enough without the undignified begging for them on behalf of the eminent only.

LONDON BRIDGES

In introducing a series of lectures on London bridges at University College recently, Professor A. E. Richardson, F.R.I.B.A., said the road bridges across the Thames from the Pool to Richmond were in a group by themselves; they included works of the first magnitude, dating from the late 18th century to the present day. There were in addition the railway bridges recording the engineering enterprise of the 19th century. London held some examples of land bridges, such as Holborn Viaduct and the monstrosity across Ludgate Hill, which an enlightened age might see removed. There were the canal bridges of a century since, the swing bridges in dockland, the railway viaducts of brick and iron that stretched out over the flat places and seemed interminable. There were also bridges connecting buildings, such as those at the General Post Office, the dainty bridge designed by Starkie Gardner in a street off the Strand, and others too numerous to mention. From the series of drawings by Bourne at Euston Station one gathered ideas of the early railway bridges designed to carry the London and Birmingham Railway out of town.

The heavy girder bridges of the railways which spanned the roads in north and south London would not be tolerated in any other city. They were a legacy of the last century, and although without charm had become familiar and even friendly in aspect.

After briefly describing the different bridges, the lecturer said it was a fascinating study examining the bridges that crossed the Thames; the wonder was that this engrossing subject was not taken up by every Londoner. The time might approach when the Thames had an embankment road on both sides from Southwark and Blackfriars to Richmond; London would never be complete until this vast work was in being.

At the close of the 18th century London, in spite of its size, could only show three bridges. These respectively were Old London Bridge, Blackfriars Bridge, and Old Westminster Bridge. The scarcity of bridges across the Thames retarded the development of South London, and even the attractions of Lambeth, Kennington, and Camberwell failed to disturb the Londoner's allegiance to the north side. The building of Waterloo Bridge, and later the development of the railways from St. Paul's, Cannon Street, Charing Cross, and Victoria opened up a new suburban field. To the railways, therefore, was due the spoliation of the fair fields of Kent and Surrey within twenty miles of the dual city. A coterie of experts had recently tendered an expression of opinion regarding the provision of at least six new bridges which were urgently required. Concurrently with the building of these bridges the regeneration of south London must be considered. The south bank of the river offered valuable sites for business and residential centres: it was imperative that the termini which encumbered the north side of the Thames at Cannon Street, Blackfriars, and Charing Cross should be transferred to the other side; through transit north and south could be arranged by means of tunnels and electric traction. A policy of reconstructing inner London must be entered upon in the near future, if only to avoid the congestion which daily became more acute. The bridges which were the pride of the last century had done their work, and it was no fault of the designers that London had thrust too great a burden upon them. The true centre of London was the river, unrivalled for its majesty and its entrancing sweep, and the retention of its amenities called for the care of responsible authorities.

In his first lecture, the following particulars were given:—

Westminster Bridge (begun 1738; finished in 1750).—Till the building of Westminster Bridge, the only communication between Lambeth and Westminster was by the ferry boat near the palace gate, which was the property of the Archbishop of Canterbury. On November 13, 1750, the commissioners of the new bridge appointed a number of watchmen to guard it, and ordered 32 lamps of a particular size to be fixed on it. Labelye, the architect, introduced a system of foundations.

The construction was as follows:—The ballast men of the Trinity House were employed to open a large hole for the foundation of the first pier, to the depth of 5ft. under the bed of the river. This was finished and levelled at the bottom, and was kept clear by a proper enclosure of strong piles. A strong caisson of oak was then prepared to the shape of the intended pier; this was made waterproof, and being brought into position was secured within the piles. The first stone was laid within the caisson on January 29, 1738. The other piers were built in the same manner.

The last stone of the bridge was laid on November 20, 1750, by Thomas Lediard. The bridge was opened at midnight on November 17, 1750, and at the time of its erection it was acclaimed to be the finest in the world. It was designed by Labelye, a Swiss architect. Its design consisted of 13 semi-circular arches besides a very small one at each end. The ascent was not excessive—a rare achievement in those days. There was a series of octagonal recesses over each pier, with benches in them. A number of these recesses had domed heads. Over the central arch were pedestals in the balustrades, intended for groups of ornamental figures which were never carried into execution.

Dimensions.

	ft.	in.
Length	1,223	0
Width of the central arch	76	0
(The rest decreased 4ft. in width on each side.)		
The width of the two small arches at the abutments, each about	20	0
Width of the raised footways, on each side	7	0
Height of the balustrade within	6	9

The foundations of this bridge rested on a solid and firm mass of gravel, at a much greater depth on the Surrey than the Westminster side, and this inequality required that the several heights of the piers should be different.

Labelye, in this bridge, departed from the mediæval practice of filling the interior of the piers with chalk, small stones, and rubbish. He built the piers the same within as without, that was, all of Portland stone, many of the blocks being of four or five tons in weight and none less than a ton. The blocks were laid in Dutch terrace, fastened together with iron cramps run in with lead. The soffit of every arch was turned and built quite through with the same care as the fronts. Over the first ring was built another of Purbeck stone, four or five times thicker over the reins than over the key, so calculated that by the help of this secondary arch, together with the incumbent load of materials, all the parts of every arch would be in equilibrium. Between every two arches there was a drain.

In spite of the precautions and care taken with the foundations, one of the piers sank, but the Commissioners ordered the arch to be taken down and rebuilt after the faulty pier had been loaded with iron cannon of incredible weight to force it to its ultimate settlement. Then the arch was rebuilt. The bridge took 11 years and 9 months to build, the Portland stone being brought up by sea. It cost £389,500, part of which was raised by different funds and the rest granted by Parliament.

The parapet was in the form of a balustrade. Between each arch was a semi-octagonal recess or turret which afforded a covered shelter for foot-passengers. Owing to the sinking of the piers these turrets were removed some years before the total demolition of the bridge, and some were re-erected in Victoria Park. Labelye said these were not only built for passengers to rest in or as ornaments, but for strengthening the parts between the arches, and thereby affording so much more weight to repel the lateral pressure. Maitland said they might have served for places of ambush for robbers and cutthroats but for the establishment of a guard of twelve watchmen specially appointed for the security of the passage during the night. These alcoves had properties somewhat akin to those possessed by the Whispering Gallery in St. Paul's Cathedral. It was possible to stand in one alcove and whisper against the wall in such a way that the whisper could be heard on the opposite side, and this irrespective of passing traffic.

Blackfriars Bridge.—Several plans having been presented for the new bridge at Blackfriars, that of Mr. Mylne was selected; the first pile for the bridge was driven in the middle of the river on June 2, 1760, and by the end of October, 1760, the first stone was laid at the north end of the bridge. The Bridge was completed in 1769, and was described as a very convenient and majestic structure.

It was built of Portland stone and consisted of nine elliptical arches, the aim of Mylne being to reduce the curving of the wood on the bridge, and to keep the openings as wide as possible. Old Blackfriars Bridge, when viewed from the water, had the effect of being low built. An unusual feature of the design of this bridge was the recessed balcony carried on two Ionic columns with pilasters which stood on a semi-circular projection of each pier above high-water mark. The bridge spread open at the extremities; at each end were two flights of stone steps leading to the water.

The bridge cost £166,217, including the expense of piling the foundations of the piers and filling-up Fleet ditch, as well as making the road from Fleet-street to the south side of the river. Fir was the wood used for the pilings. Mylne, it was said, was so impressed by the good condition of some very old planks of this wood, which were found in the bed of the Thames and had proved more durable than oak, that he determined to use fir Mylne's theories regarding fir for the piles were not justified by results, for after a few years trouble was experienced with the foundations, and repairs had to be undertaken owing to the continual settlements. The bridge was repaired between 1833-1839, but from that time on it continued to give trouble and thus occasioned the building of the present unsatisfactory bridge.

A new bridge, the present one, was determined on in 1864. This was built of Portland stone for the arches and masonry of arches. The construction turned out to be very thin, and was stuffed with river ballast mixed with bones and small old-fashioned pipes. It took ten years to build.

For the new bridge competition 12 designs were submitted, and the award was finally given to Mr. Cubitt.

The present bridge had five arches, and the style was Venetian Gothic. The piers were grey, the columns red granite, the bases and capital of carved Portland stone; the bases, balustrades, and other features were of ornamental iron. It was called "a monster of depravity, with polished granite columns of amazing thickness with carved capitals of stupendous weight, all made to give shop-room for an apple-woman, or a convenient platform for a suicide. The parapet, a fiddle-faddle of pretty cast-iron arcading out of scale with the columns, incongruous with the capitals, and quite unsuited for a work that should be ornamental and useful. At each corner of the bridge was a large block of masonry apropos of nothing."

Old Southwark Bridge.—The cost of this bridge was computed at £300,000. It was designed and built by John Rennie the elder for

a public company, and cost £800,000. It consisted of three cast-iron arches 210 ft. each—about 42 ft. above the highest spring tides, the ribs forming a series of metal caissons—a principle new in the construction of cast-iron bridges, and in this case very successful. The first stone was laid on May 23, 1815. The structure was put together so well that when the work was finished scarcely any settlement was observed. Experiments undertaken subsequently showed that the arches rose in the summer about one inch and a half. The bridge was constructed on the centering principle, the centre being lowered into position and hoisted from a floating stage.

Waterloo Bridge.—Considered by Canova to be "the noblest bridge in the world" and alone worth coming from Rome to London to see, this bridge had a monumental dignity combined with lightness and grace, and ranked with London Bridge as the most important structures of the opening years of the nineteenth century. It was designed by John Rennie, and, with the approaches, cost £1,000,000.

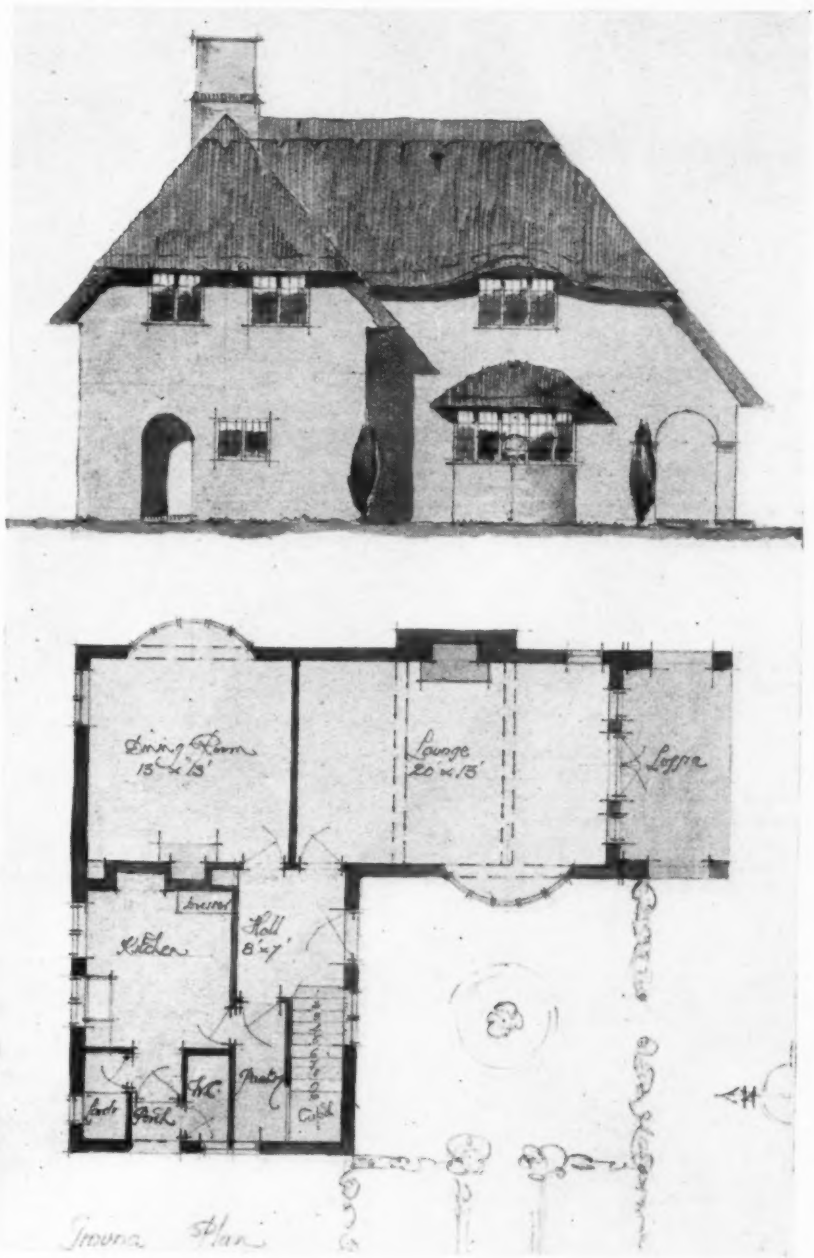
The design consisted of nine semi-elliptical arches, with attached Greek Doric columns in front of the piers, with an entablature and cornice surmounted by a balustrade. The roadway was level from the Strand side, and on the Surrey side was carried by a gentle declivity, on a series of brick arches, some of which were used as warehouses. When the bridge was first built the width of the iron pier to its curtailment by the Embankment was 1,326 ft. at high-water-mark. The river arches were each of 120 ft. span and 35 ft. high. They were supported on piers 30 ft. thick at the foundations diminishing to 20 ft. at the opening of the arches. These piers were 87 ft. long, with points as cutwaters. As now seen, the first arch on the Middlesex side spanned the Embankment. The land arches on the Surrey side amounted to 40, 39 of which were semicircular, 16 ft. in diameter. The entire length of the bridge and causeways was 2,426 ft., made up of 1,380 ft. for the entire length of the approach from the Strand, and 766 ft., the length of the causeway on the land arches of the Surrey side. The first stone was laid on October 11, 1811.

Architecturally considered, the bridge was without question one of the finest civic structures in the world. It was built at a period when the Greek Doric was in the ascendant, and this to some extent influenced the architect-engineer in his choice of an order as a decorative feature which would be an integral part of the fabric and at the same time give an expression of strength and contrast. The richly ornate front of Somerset House no doubt played a part in determining the character of the bridge. Accordingly the designer schemed the piers to be 20 ft. wide, each having projecting buttresses, supported by two three-quarter Doric columnar features, the whole being surmounted by a Doric block cornice and balustrade parapet, level from end to end, the same as the roadway.

The piers and abutments were founded in the solid bed of the river, which was stony gravel; they rested on a wooden platform, supported upon piles 12 in. in diameter, driven 20 ft. into the bed of the river. The whole of the arches and exterior face of the bridge were built of Cornish granite from the vicinity of Penryn, and the balustrades were made of fine grey Aberdeen granite. Waterloo Bridge owed no small part of its effect to the magnificent tooling of the granite, which was ribbed and drafted in a novel fashion. There were to be seen evidences of a technique which at the time was an innovation in London. The interior stone consisted of hard sandstone from Derbyshire and Yorkshire.

In 1882 it was discovered that the scour of the river was washing away the river bed and exposing the foundations of the bridge, and works to protect the foundations were completed in 1884 at a cost of £62,705.

(To be continued.)



Proposed Cottage at Denham.

Mr. Robert G. Muir, F.R.I.B.A., Architect.

THE ARCHITECTURAL ASSOCIATION

On Monday evening Mr. H. S. Goodhart-Rendel, F.R.I.B.A. (President), occupied the chair at a general meeting of the Architectural Association, at 35, Bedford-square, W.C.

Mr. Edward A. Boyle was reinstated to membership, and Mr. O. W. M. Law was unanimously elected a member.

Architecture in Painting.

Mr. Charles Marriott then read a paper on Architecture in Painting, in the course of which he said the connection between architecture and painting was very old and very close, and it was twofold. There was the relation of painting as applied to architecture, and there was the relation of architecture to painting as a subject of representation. Properly the first did not come into that discussion, but it must be glanced at because of its bearing on the second. Whether architecture or painting came first must be left to the archæologists, but it was certain that at a very early age man began to decorate the walls of his habitation with scratchings or paintings. There was no reason to suppose that the application of one art to the other was closer than that occasioned by their respective materials, and any architectural character that was given to the paintings was more or less instinctive. The great thing was to remember that painting was essentially a more flexible art than that of architecture, and it was the disregard of that fact which had caused some of the peculiarities in the reaction of the pictorial representation of architecture on architecture itself which had to be considered. The two arts might be said to start from the same base, but they very quickly diverged in their possibilities. About the middle of the sixteenth century came the discovery of form as a separate consideration; until then both architects and painters had treated form more or less as a consequence of what they were doing. They painted or built in an orderly manner, composing by instinct rather than rule, in order to make things "ship-shape." They began to consider form as an end in itself, and did not always distinguish clearly between architectural and pictorial effect. That was partly due, no doubt, to the fact that many of the great architects of the period were also painters and sculptors. They were apt to build like painters and paint like architects.

Towards the end of the eighteenth century there seemed to have been a settling down. Full advantage was taken of the superior flexibility of painting, but architectural dignity was preserved. But partly as a result of the Romantic movement there was creeping in a unique concern for accidental effects, for the picturesque. The picturesque was not new—there were the studies of ruins by the seventeenth and eighteenth-century men—but now it became a cult; and combined with the increased attention to atmospheric effects, the consequences in painting reflected unfavourably upon architecture. But they must not forget the admirable representations of architecture produced by the cult of the picturesque and impressionism, such as the paintings of Frank Brangwyn, the etchings of Whistler and Pennell, and the cathedral series of Claude Mouet. The point was that in those works architecture was represented for its accidental effects rather than for its essential character, and there could be no doubt that during the second half of the nineteenth century architecture was beguiled by painting in a similar direction.

With the turn of the century there was a marked change in the treatment of architecture by painters, draughtsmen and engineers. Once more architecture was represented for what might be called architectural reasons. The tendency was not new, but it became the rule rather than the exception. Particularly in engraving, as represented by Sir D. Y. Cameron, Mr. Muirhead Bone, Mr. F. L. Griggs, Mr. William Walcot, and others. There were differences between them, but the general tendency was to take architecture on its own merits as architecture. It was the same in painting, as represented by the works of Sir D. Y. Cameron, Mr. Walter Sickert, and many other members of the London group. As compared with the works of the nineteenth-century painters they showed a quite remarkable pre-occupation with the structural facts of architecture to the disregard of the picturesque effects—a return to the attitude of the primitives with the gains of the interval in formal emphasis and atmosphere. The great thing that struck one in looking at the subject as a whole was that the appeal of the architectural subject to the painter bore no relation at all to the merit of the architecture. Very often the bad architectural subject would be popular with the painter and etcher, while he would ignore the good subject; for instance, one found that the Charing Cross Railway Bridge was more popular than, say, Waterloo Bridge. At the present time there was an enormous number of very good painters who were representing architecture with great emphasis on the architectural character as well as the architectural form. When architects themselves made pictorial representations of architecture they were very apt to emphasise the pictorial side of it rather than the architectural, and one missed the effect of stability; that was probably a natural reaction from the work of every-day professional practice.

To sum up, at the present moment there seemed to be a clearer recognition of the two arts; architects were less inclined to build pictorially, and painters were less inclined to destroy the architecture in their representation of it.

A vote of thanks to the speaker was proposed by Mr. J. C. Squire

Sir Martin Conway seconded the motion, and Mr. Gilbert Jenkins, Mr. Oswald P. Milne, and Mr. Ansell took part in the discussion.

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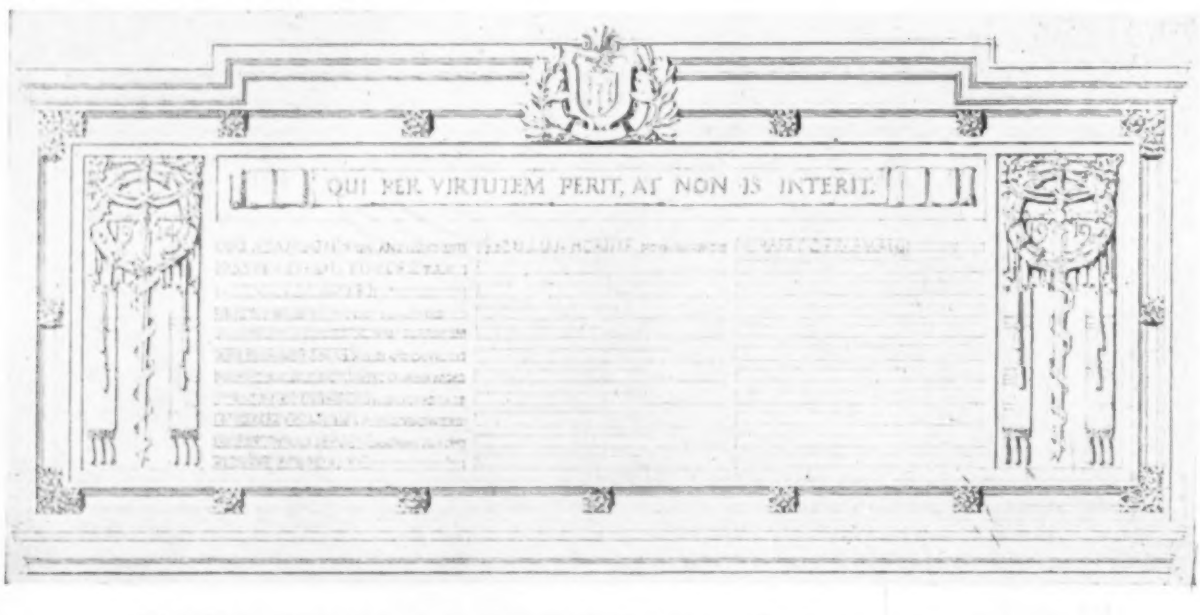
ILLUSTRATIONS

Our illustrations this week consist principally of designs for small houses and bungalows.

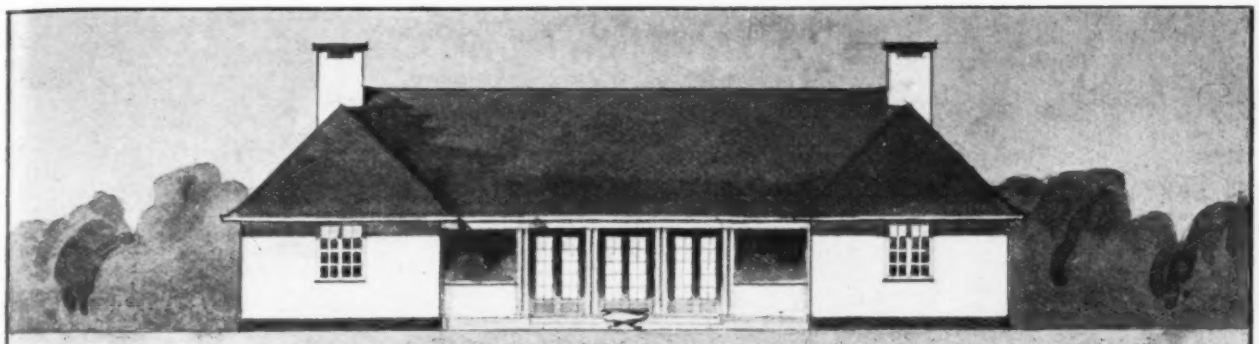
War Memorial, King Henry VIII School, Coventry.

It is proposed that the memorial at the King Henry VIII School, Coventry, should take the form of a wall tablet, to be executed in English oak, and to be fixed on the existing panelling in the position indicated on the ½ in. scale detail, *i.e.*, to the right of the doorway under the musicians' gallery on the south side of the hall. The overall sizes of the tablet would be 3 ft. 8 in. high by 8 ft. 2 in. long. Centrally over the tablet would be the School Arms surrounded by carved laurel sprays, while on the two sides of the central name panel would appear the sword of War, no longer used for active service, but bound about with ribbons and surrounded with the wreath of honourable victory—symbolical is the sword with its cruciform shape of victory also over death, again inside the wreath are the dates, 1914–1919.

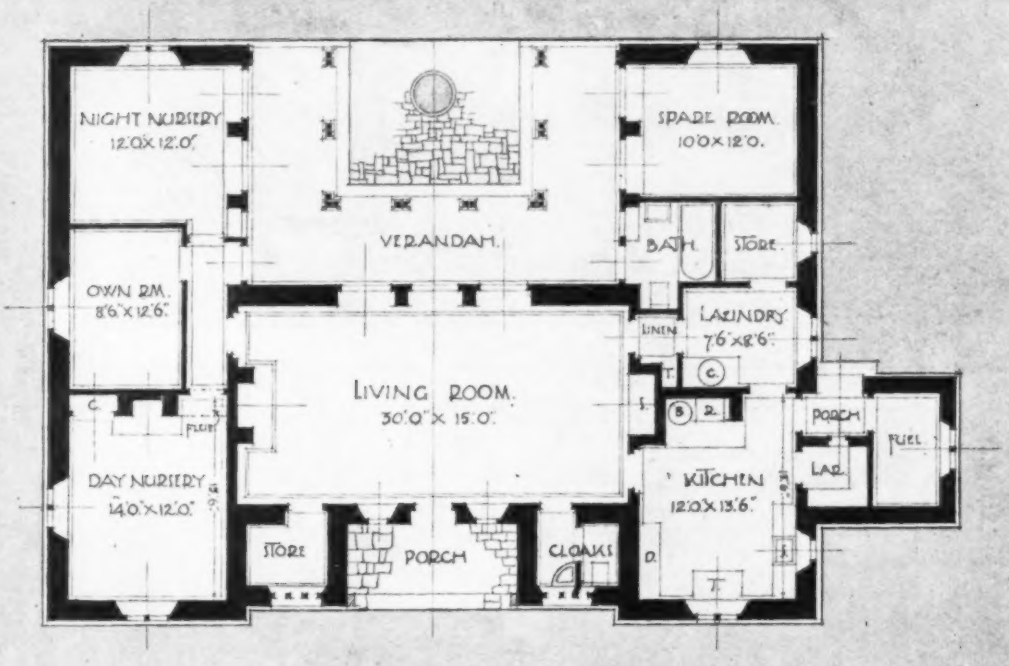
Mr. H. Johnstone is the architect for the scheme.

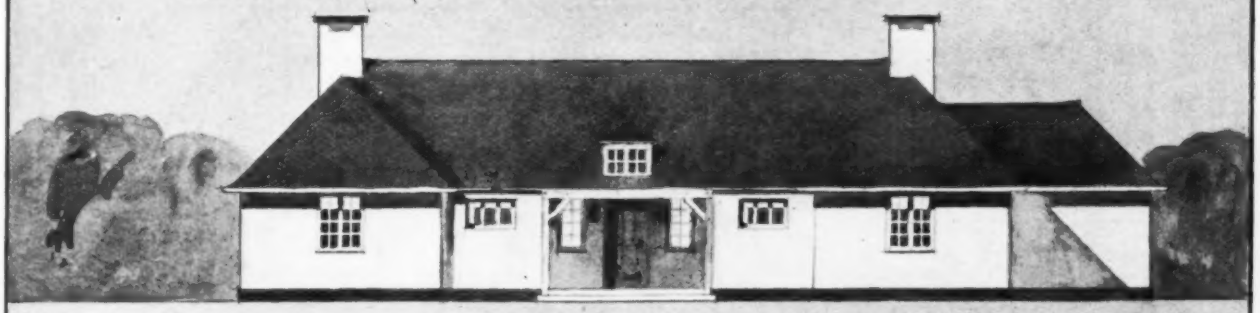


King Henry VIII School War Memorial, Coventry. Mr. H. Johnstone, Architect.



GARDEN ELEVATION.





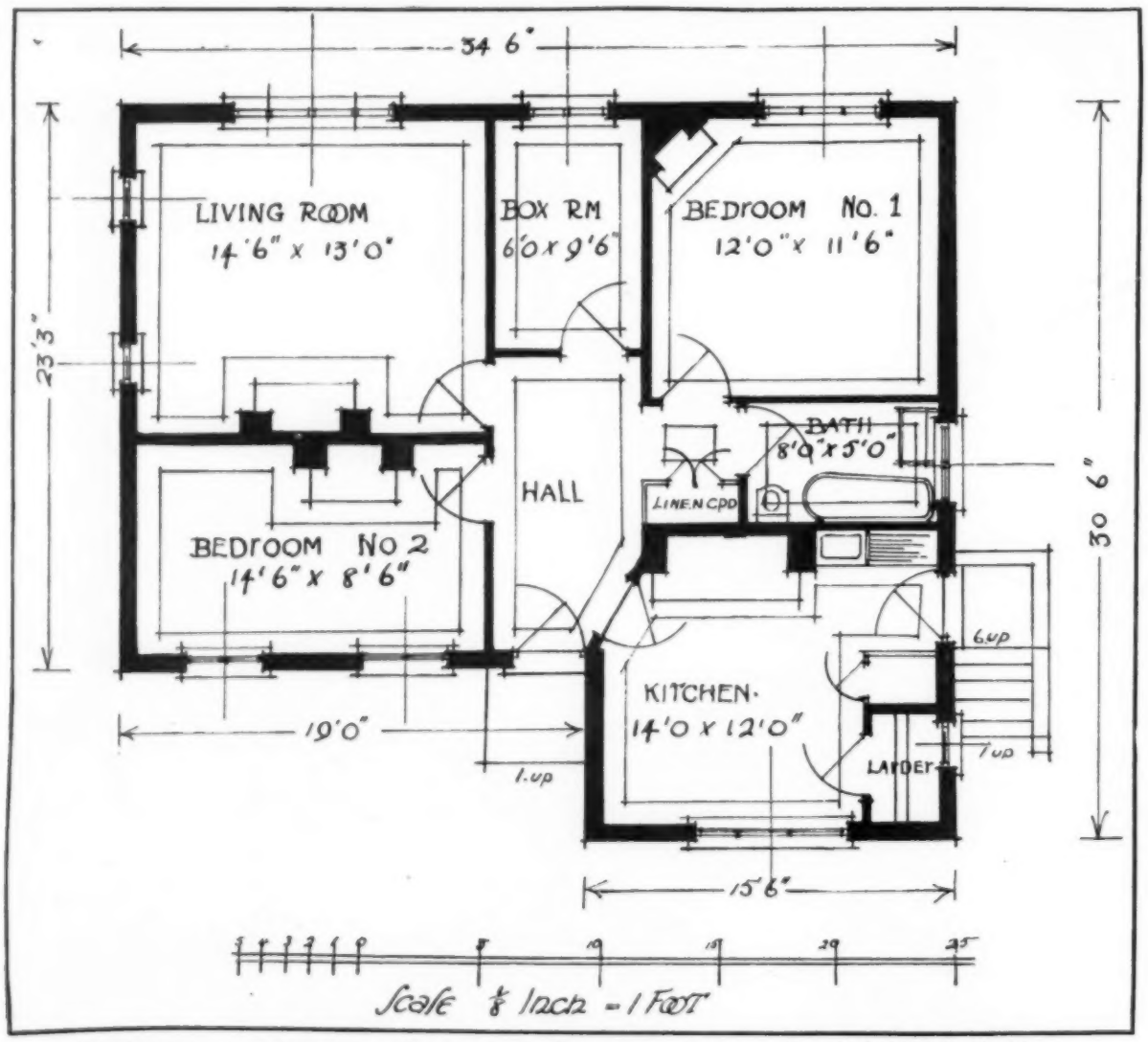
FRONT ELEVATION.

BUNGALOW IN PISÉ DE TERRE.
: FOR MISS M. PERRY : SYDNEY : N.S.W. : AUSTRALIA :

A. MAXWELL ALLEN: ARCHT.
34 BEDFORD SQ.
W.C. 2

Cottage, near Sydney, New South Wales. Mr. A. Maxwell Allen, Architect.

The accommodation required for this bungalow was one large room as living and dining room combined, day and night nurseries for two children, a small room for the client's own use, and one spare bedroom. A small laundry or washhouse and ample storage space were also suggested The climate renders few fires necessary, and the approachto bedrooms and bathroom from the verandah alone is common practice. As the verandah is used as a sleeping porch during the greater part of the year, French doors have been provided in the bedrooms to facilitate the moving of beds. The living-room contains a built-in sideboard, and is taken partly into the roof for added coolness.



Bungalows at Amersham. Messrs. T. P. Bennett & Hossack, F. and A.R.I.B.A., Architects.

[These two bungalows have extensive views to the rear. The site, a difficult one, required to be cleared of trees, and sloped rapidly in two directions. The bungalows were constructed with white rough-casted local bricks, dark brown tiled roofs, and standard metal cottage casements, the internal and external woodwork being finished in Solignum. The approach to the bungalows is by means of brick steps up a steep bank from the roadside, and thence by a curved path to the front entrance, the whole being so arranged that the least possible amount of excavation was necessary. The builders were Messrs. Gomm & Sons, of Chesham Bois.]

BRAMSELL'S FARM.

MARKBEECH. KENT

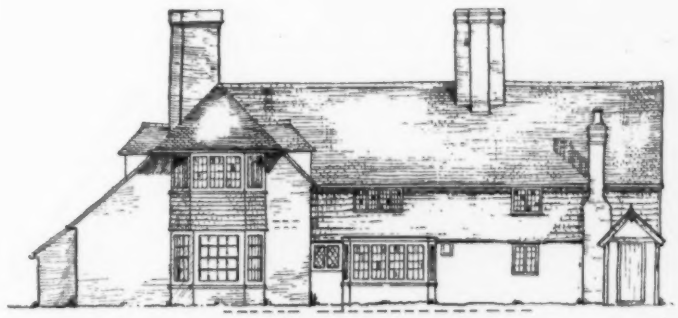
ALTERATIONS & ADDITIONS.

for Miss E.F. Harrison.

Scale – 8 Feet per Inch

Baillie Scott & Beresford
Architects
8 Gray's Inn Sq. W.C.
London

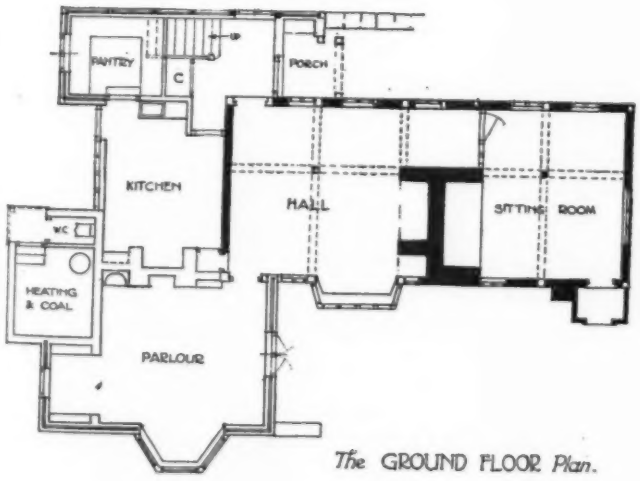
The EAST Elevation.



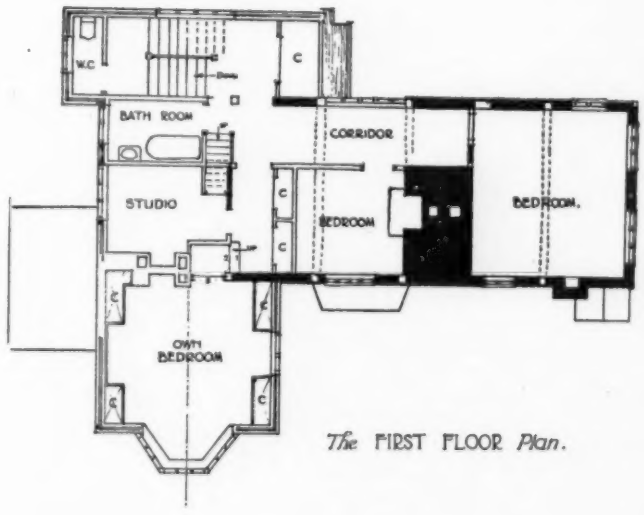
The WEST Elevation.

The SOUTH Elevation.

The NORTH Elevation.



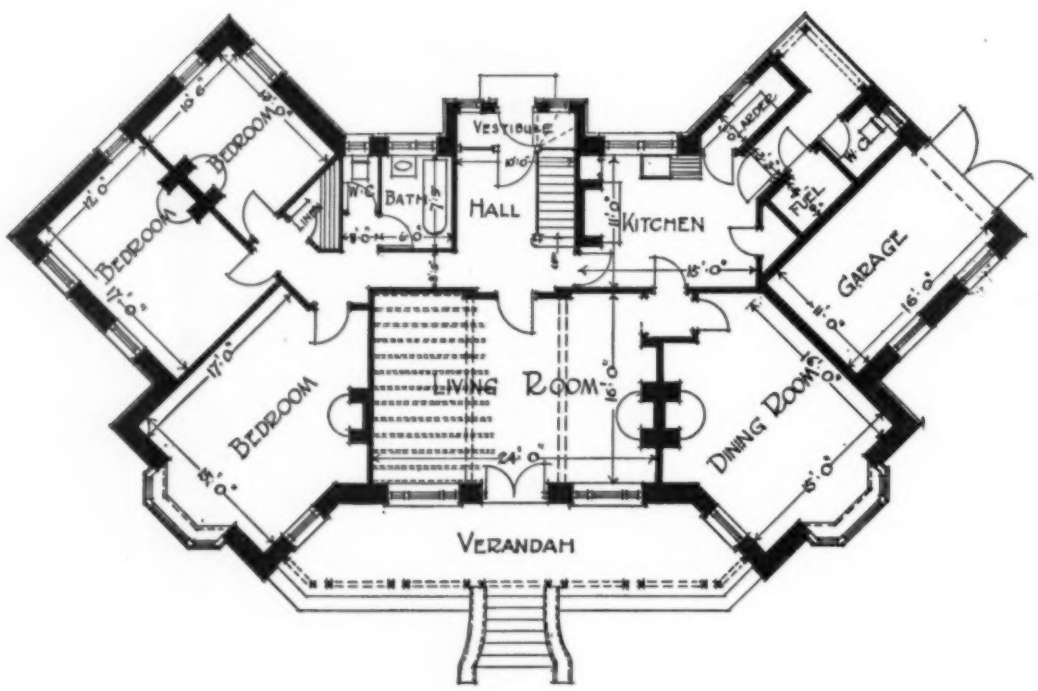
The GROUND FLOOR Plan.



The FIRST FLOOR Plan.

Bramsell's Farm, Markbeech, Kent. MESSRS. BAILLIE SCOTT & BERESFORD, Architects.

Proposed Bungalow Worlebury for E. S. Stradling Esq. J.P.



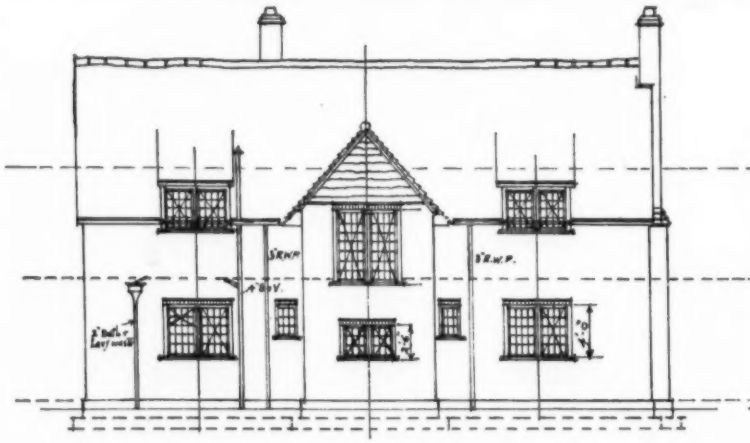
GROUND FLOOR PLAN

10 5 0 10 20 30 40 50

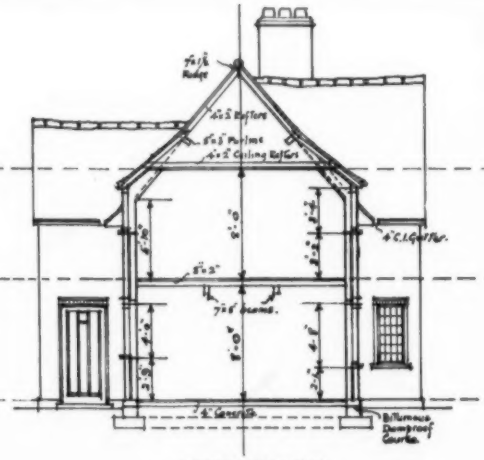
Scale of Feet

Fry Paterson & Jones.
Architects.
Weston super Mare.

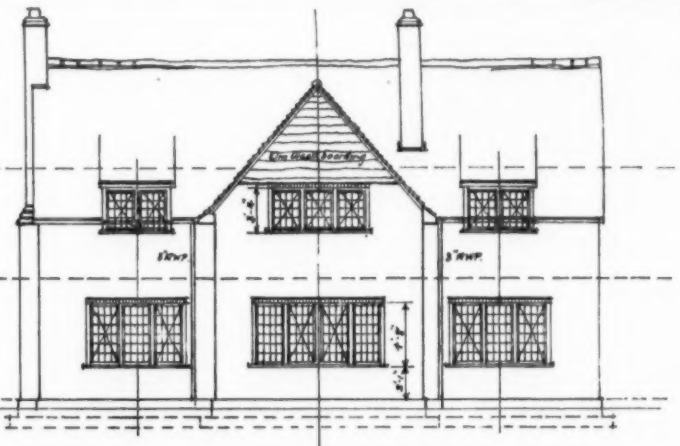
The site of this Bungalow is on the top of Worlebury Hill near Weston-super-Mare facing due South, sloping from North to South. In addition to the accommodation shown on the plan provision is made in the roof space for a large Smoking Room 16′ 9″ × 14′ 6″ and a Maids' Bedroom. All the rooms with the exception of one Bedroom command good views of the Mendip Hills with occasional glimpses of the sea. The external walls are built with local stone 18″ thick, the plinth being faced with local stone facings, and walls above plinth level being rough casted. The Front Entrance is constructed in brick with multi-coloured facings, and the roof covered with dun coloured small tiles.



·NORTH·WEST·ELEVATION·

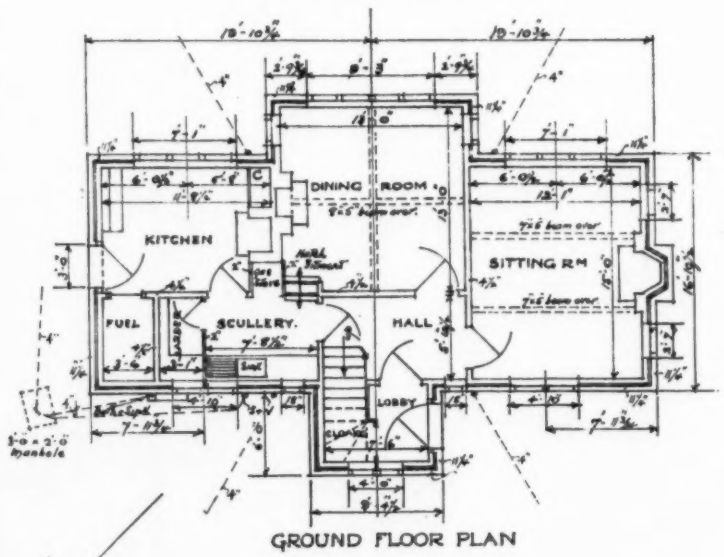


·CROSS·SECTION



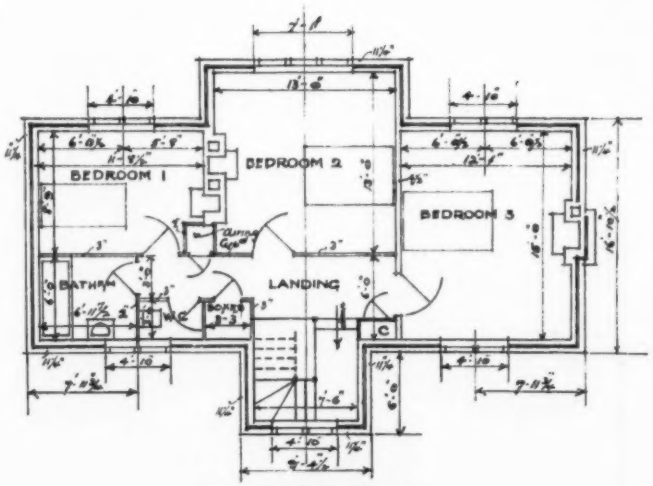
·SOUTH·EAST·ELEVATION·

·PROPOSED·HOUSE·MARTINSEND·LANE·
·GREAT·MISSENDEN·FOR·W·PUTMAN·ESQ·



GROUND FLOOR PLAN

SOUTH WEST ELEVATION

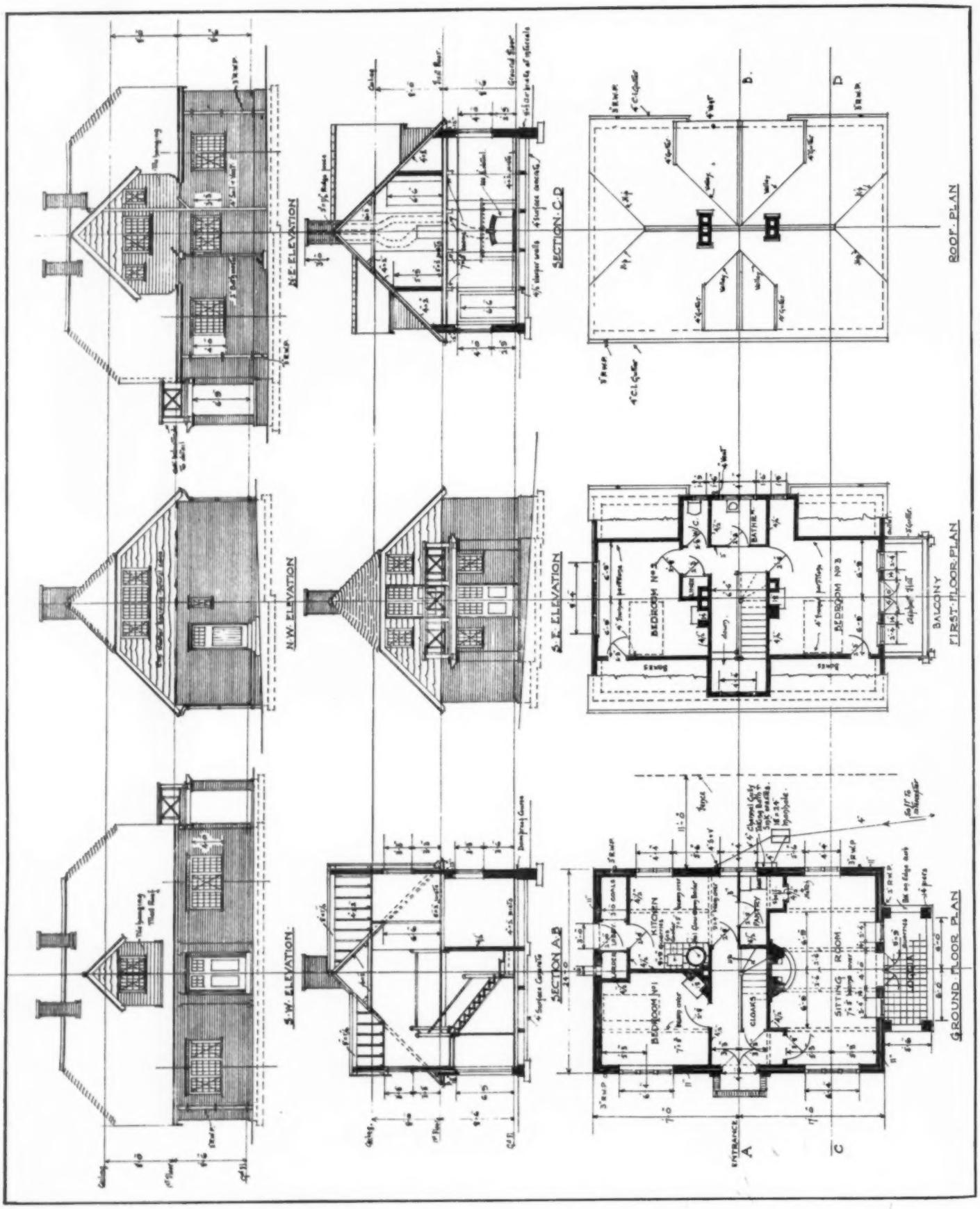


FIRST FLOOR PLAN

House at Prestwood.

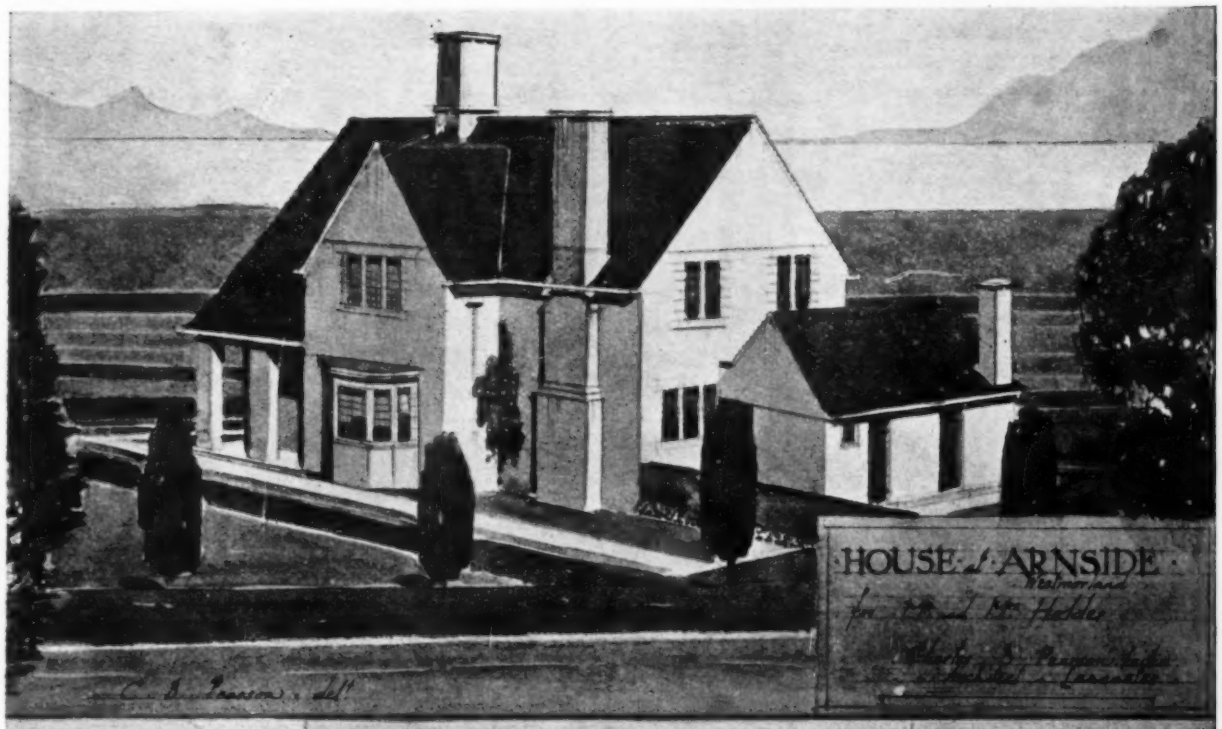
MR. J. HAROLD SAYNER, A.R.I.B.A., Architect.

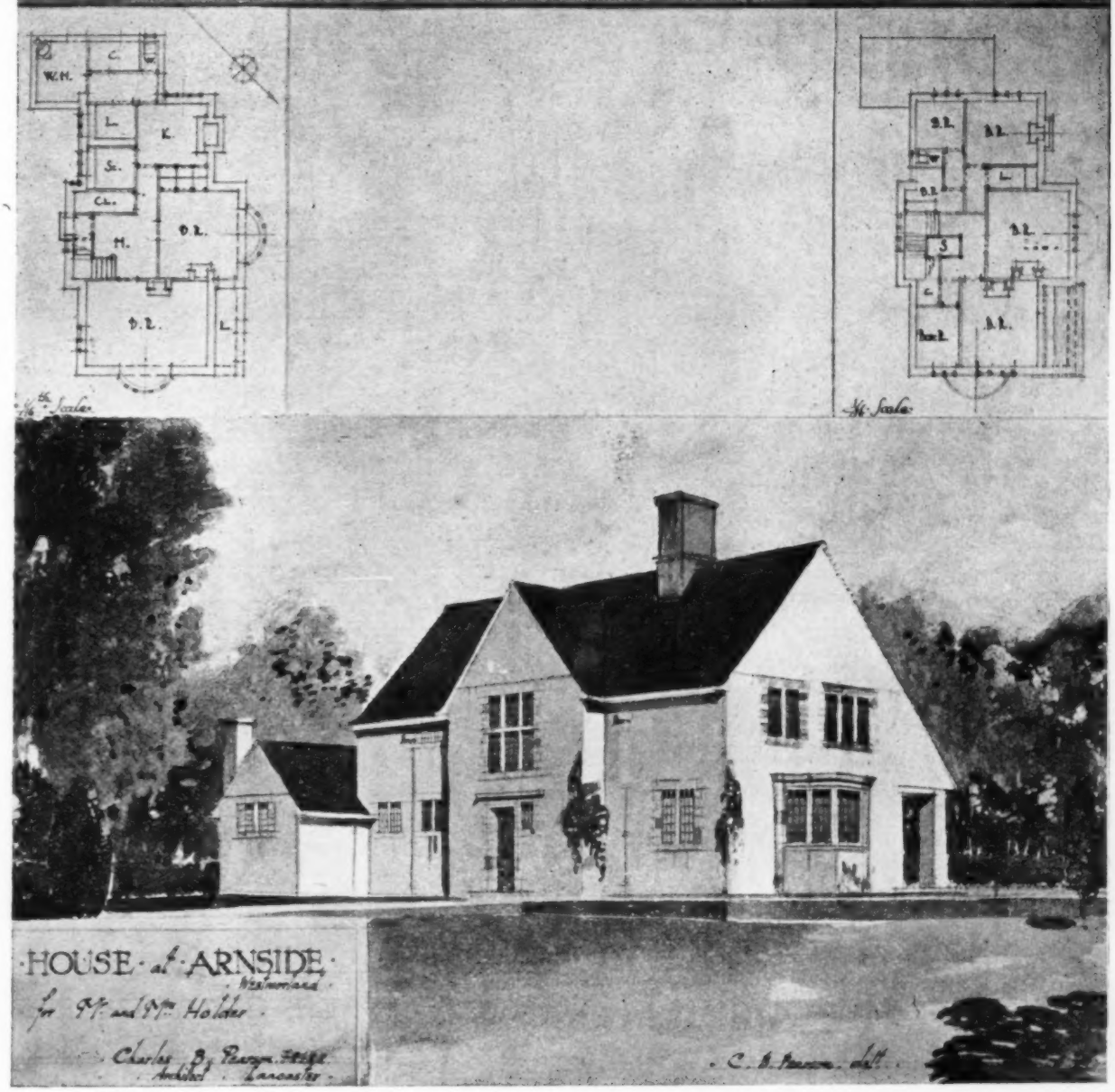
[This house has just been completed by Messrs. Geo. Parsons & Sons, builders, of Prestwood. The cost was £1,000, including paths, fences, drains, and gas laid on to twelve points. Materials: Multi-coloured local facing bricks, stained; tiled roof; elm weather-boarding to gables. "Thermostove" range in kitchen supplies domestic hot water to bath, lavatory, towel rail and sink, and the hot tank, fixed immediately over the recess for gas cooker, gives adequate heat for the airing cupboard on first floor.]



Semi-Bungalow at Prestwood. Mr. J. HAROLD SAYNER, A.R.I.B.A., Architect.

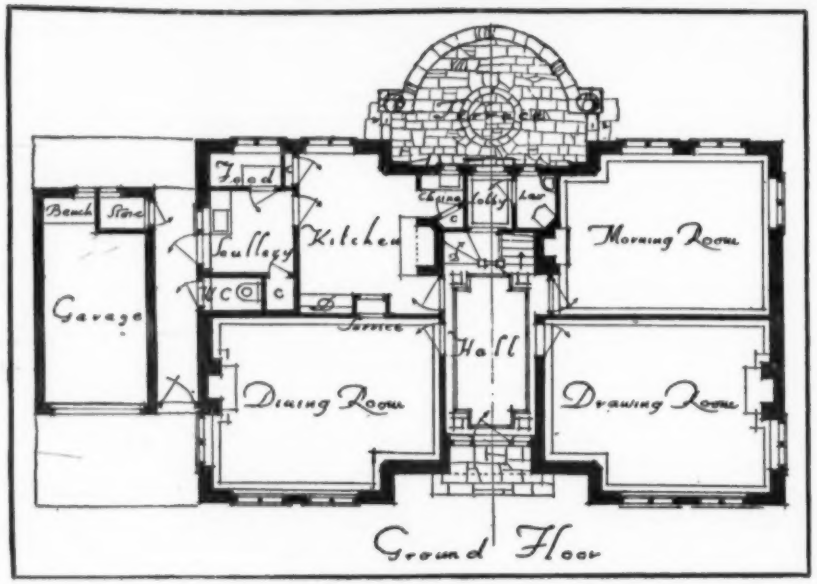
[11-in. cavity walls faced with selected old stocks and local greys; machine-made stained roofing tiles; cost £850. Contractors H. J. & A. Wright, Ltd., Great Missenden.]





MR. C. B. PEARSON, F.R.I.B.A., Architect.

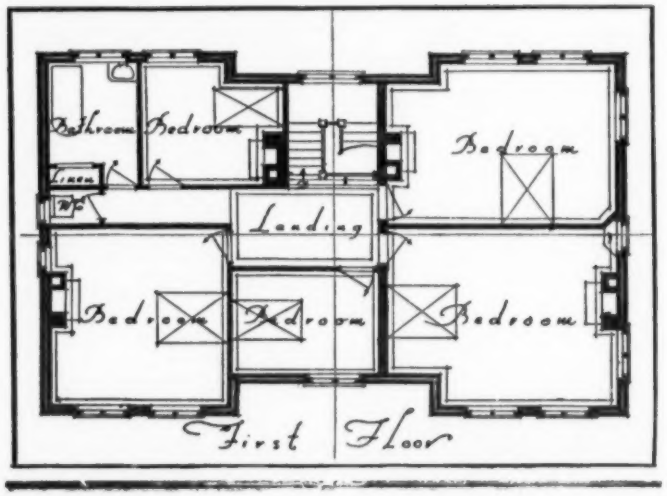
[This design has been modified in execution. The walls are of brick with rough face, and the roofs are of brindled tiles, although slates were originally intended. The windows are of wood with lead glazing throughout and metal casements to opening portions. Messrs. Parkinson & Sons, of Lancaster, were the contractors. Mr. C. B. Pearson, F.R.I.B.A., of Lancaster, is the architect.]

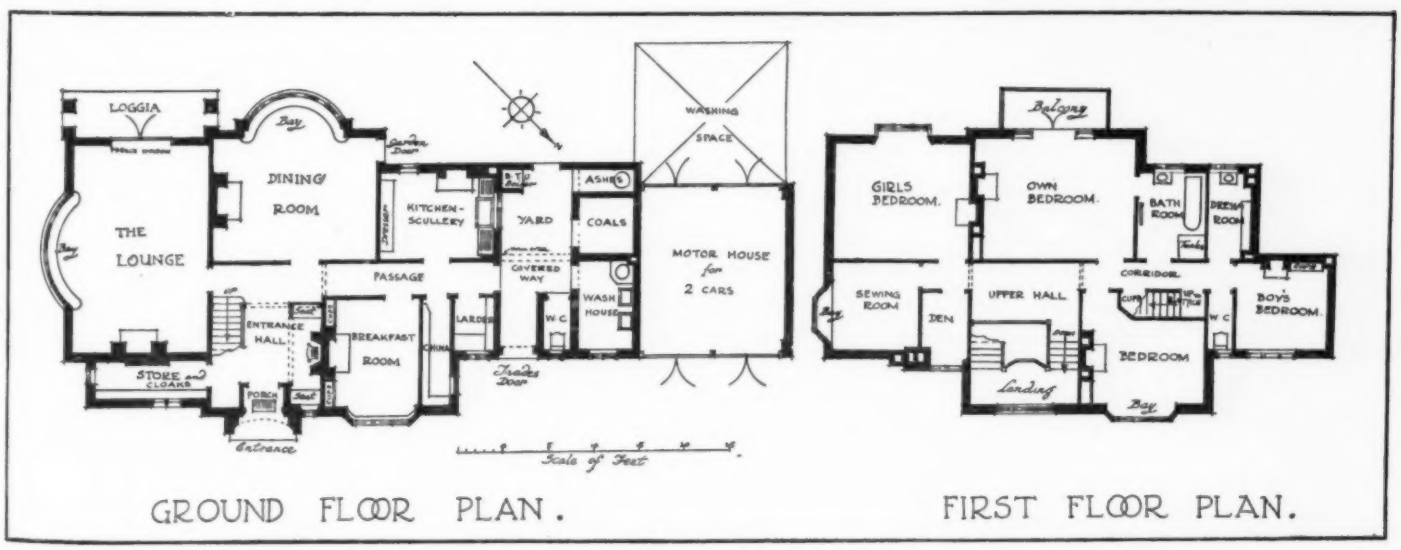


House at Croydon.

MR. SYDNEY E. CASTLE, M.S.A., Architect.
(*See p.* 000.)

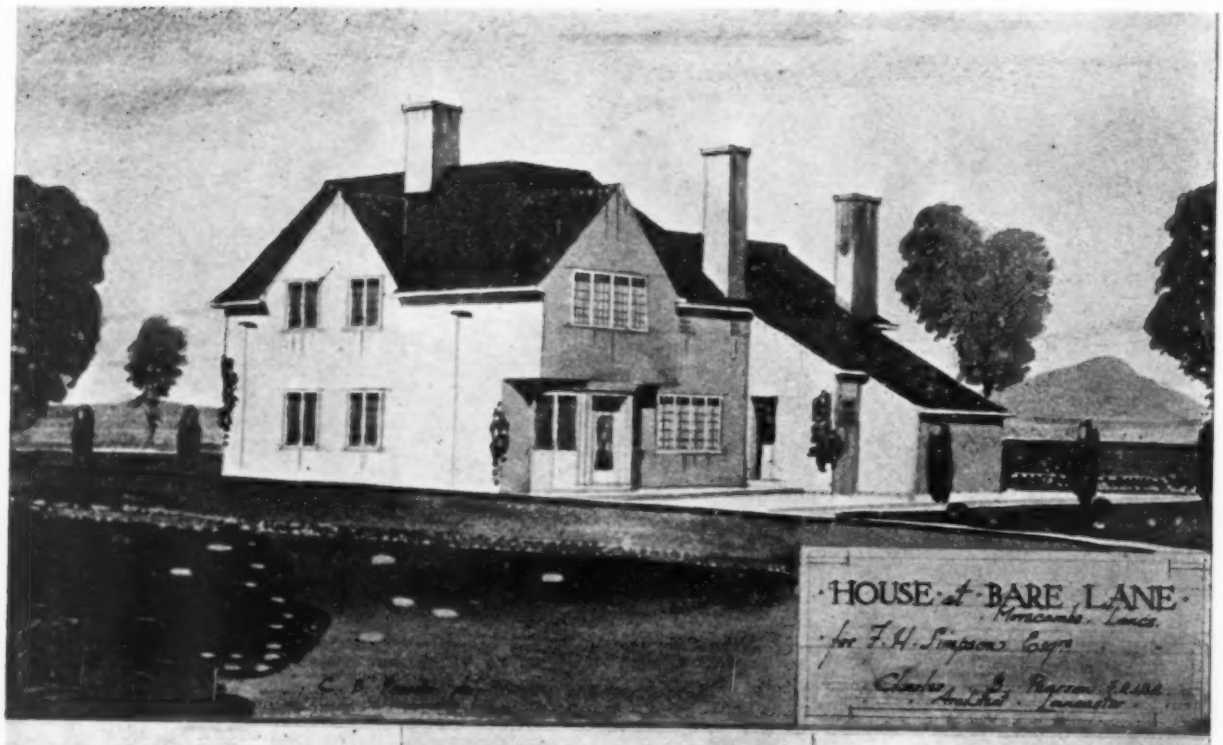
[This house has recently been completed at Radcliffe-road, on the Shirley side of Croydon. The work is generally compased of mottled brick factngs, with black brick dressings and hand-made tiles to the roof. The windows are in leaded glass and irno casements. Internally, the house is designed with a simple Georgian feeling throughout. The builders were Messrs. Lewis, Helby & Tanner, of Croydon.]

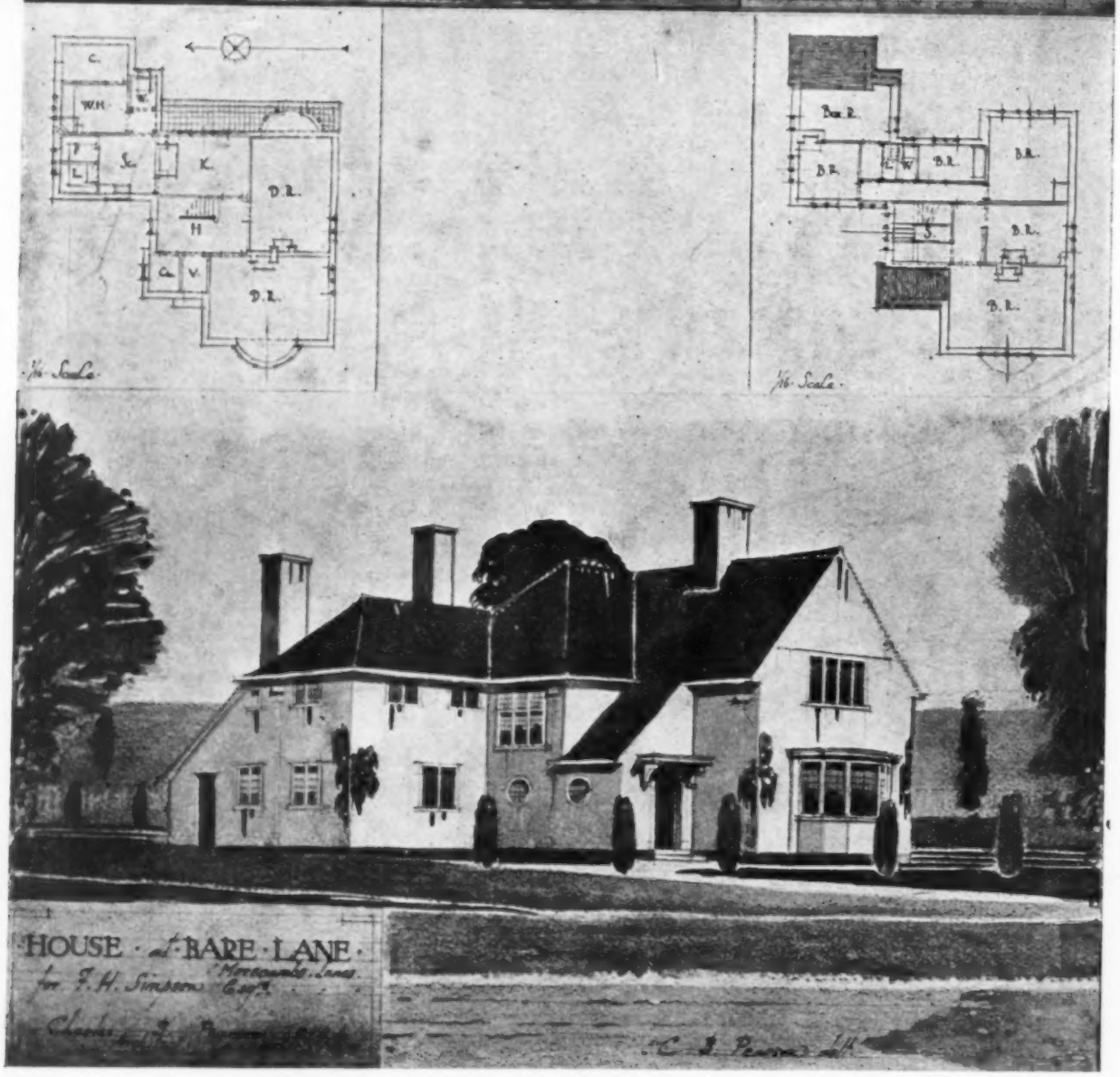




House at Moseley, Birmingham. Mr. Marcus O. Type, A.R.I.B.A., Architect.

[This house was planned to comply with the special requirements of the owner. The materials are 2¼ in. Staffordshire brindled bricks, "Rosemary" roofing tiles, and white Hollington stone; the entrance hall is finished with oak. Mr. Marcus O. Type, A.R.I.B.A., of Birmingham, is the architect. The builder is Mr. A. R. Waldron, of King's Heath, and the cost about £3,300.]



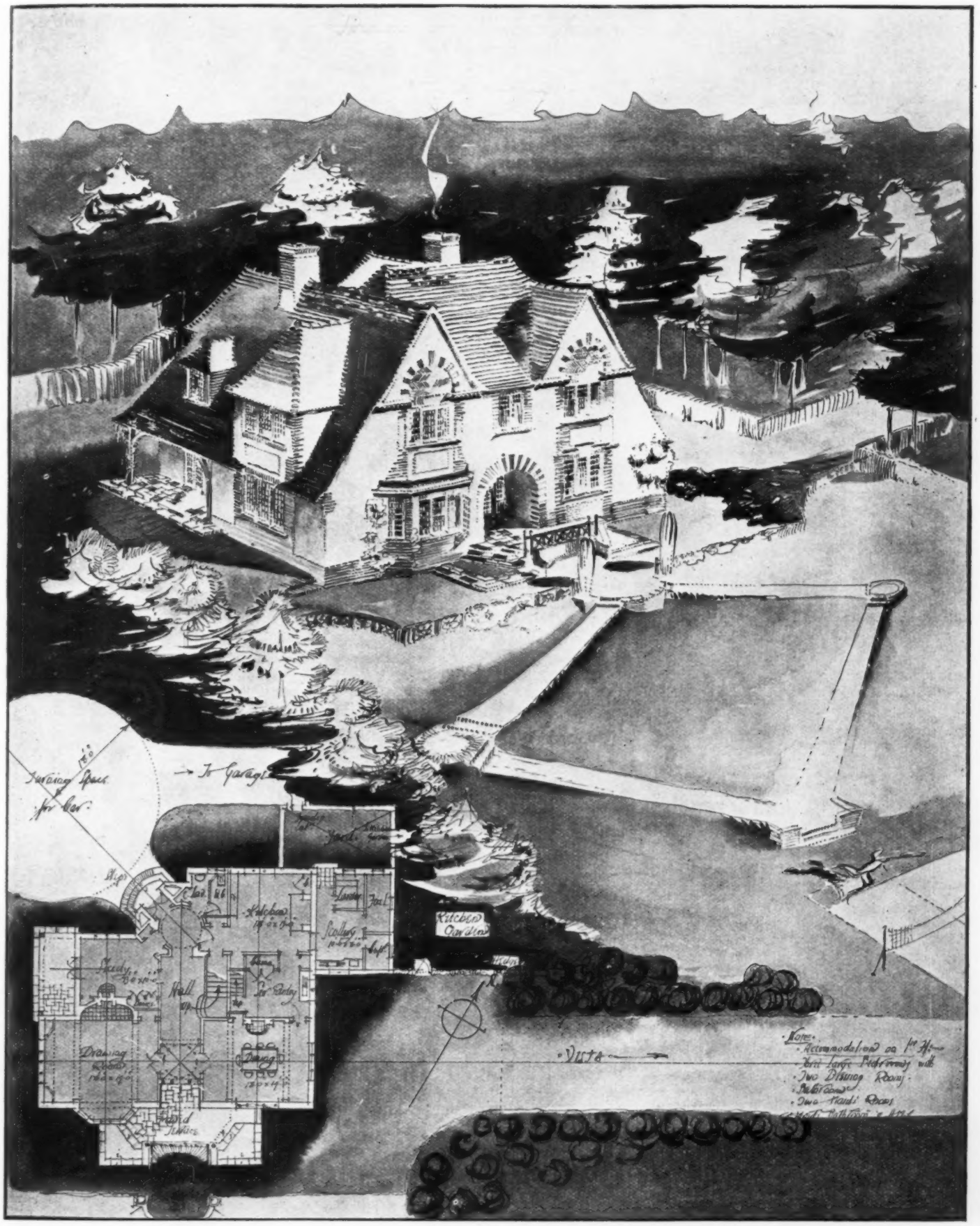


House at Morecambe.

MR. C. B. PEARSON, F.R.I.B.A., Architect.

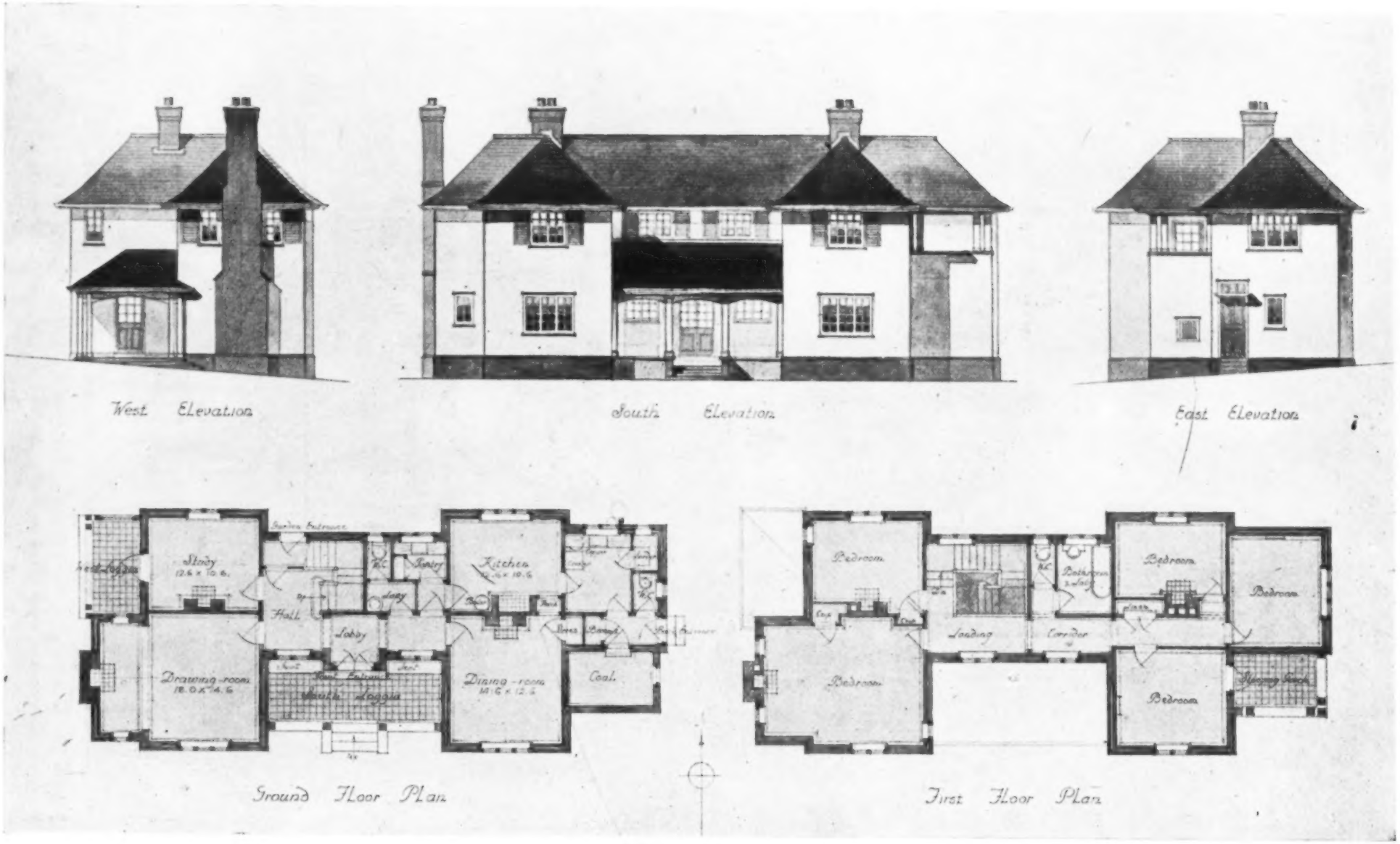
[This house is in course of erection. The walls are of brick with roughcast face above a plinth of Accrington facings. The whole of the windows (except bays) are to be in leaded lights in wood frames with metal casements to opennig portions; the lower portions of bays to be glazed with plate glass. The roofs are in brindled tiles in varied colours.

Messrs. Hillman & Son, of Morecambe, are the contractors. Mr. C. B. Pearson, F.R.I.B.A., of Lancaster, is the architect.]



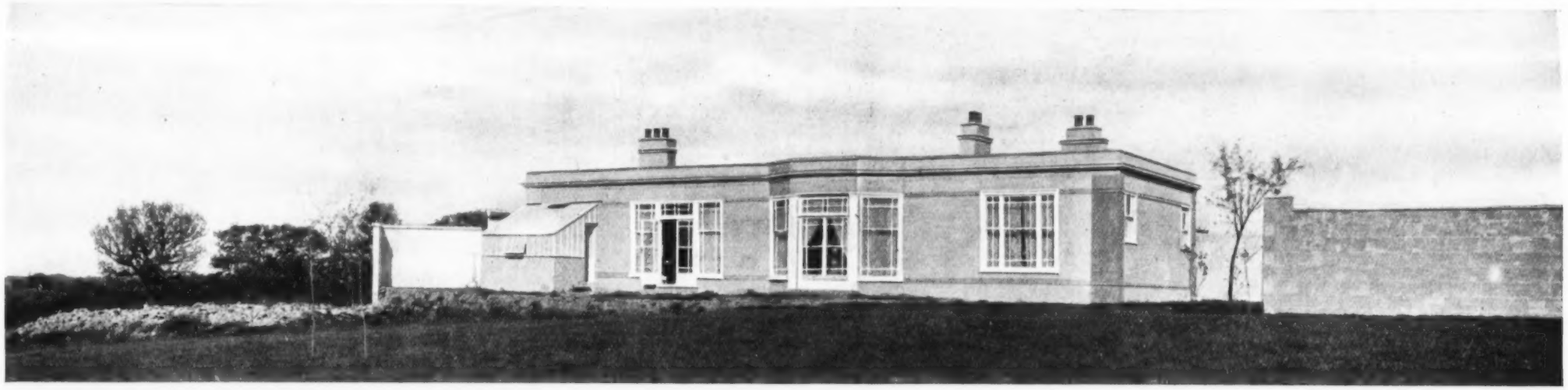
Proposed House at Knockholt. Mr. R. H. Cameron, A.R.I.B.A., Architect.

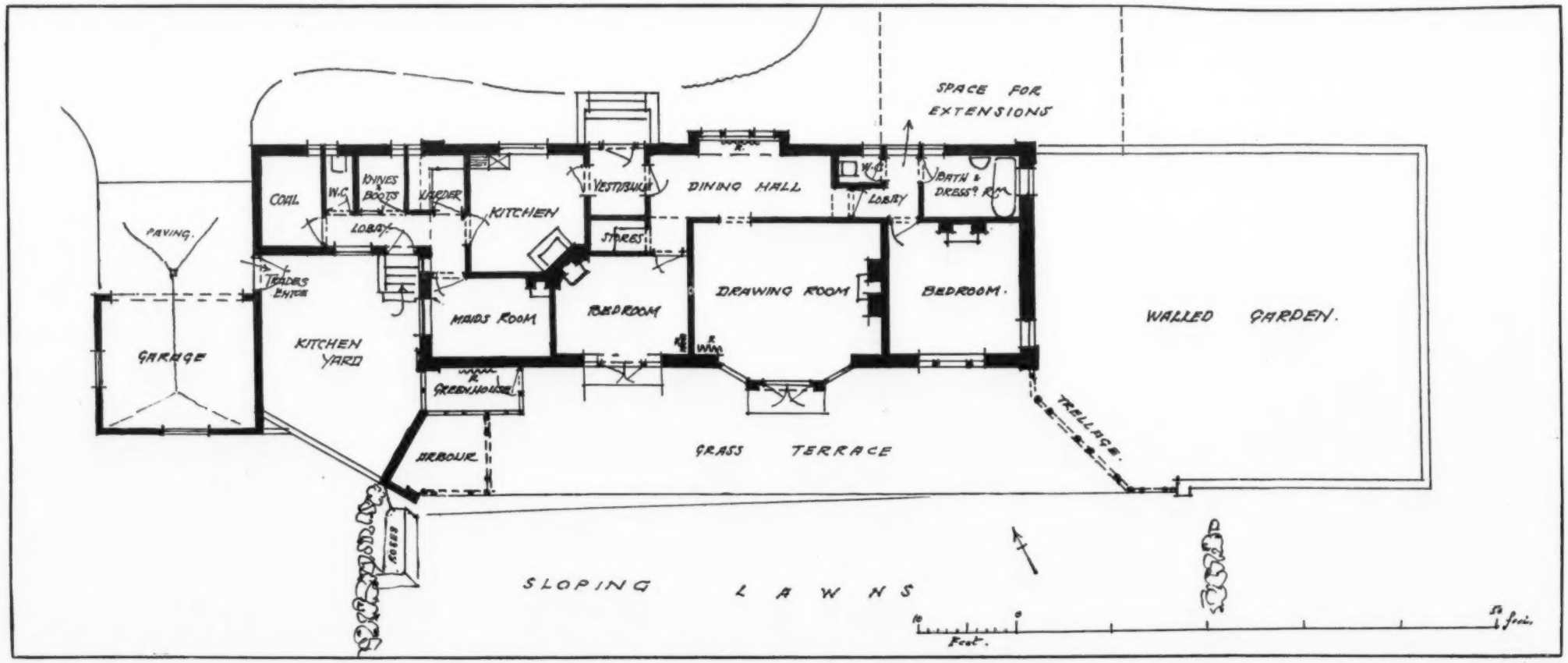
[The purport of this work is to provide an attractive house in a wood with vistas arranged from the principal windows and hall, both for the purposes of aspect and ventilation. The accommodation consists of dining, drawing room, study, three large bedrooms, two dressing rooms, two maids' rooms, and conveniences. There is a garage for two cars, yard, and kitchen garden. It is proposed to use cream-tinted plaster, picked mottled bricks and antique tiles for the exterior.]



Proposed House at Rickmansworth.

MISS GERTRUDE W. M. LEVERKUS, A.R.I.B.A., Architect.





Bungalow near Sevenoaks. MR. W. K. MCDERMOTT, A.R.I.B.A., Architect.

[This bungalow was designed for a site on the top of a hill overlooking the Weald of Kent, and the plan was evolved to meet the desire to secure the view and sunlight from as many aspects as possible.]

LARGE GARAGES FOR THE HUNGARIAN GENERAL POST OFFICE

By S. BIERBAUER (*Chief Architect of the Hungarian General Post Office*).

THE Hungarian Post Administration decided in 1913 to establish a large central vehicle depot in Budapest in which to shelter all the post vehicles used in Budapest, namely 100 horse-drawn vehicles, 500 motor-cars and 100 motor-cycles, and also the necessary repair workshops, and habitation for 250 families of the married chauffeurs and labourers. The problem being an important one, the chief of the technical department of the Hungarian Post Administration, together with the leader of the building department of the Post Office, visited Austria, Germany, Holland, Belgium, England and France, to study buildings of the kind, but found only in London and Paris garages, such as the garage of the largest taxi-cab undertaking in London for 1,200 vehicles, and one in Paris in the Rue de Wagram, with a capacity of 850 cars. Both buildings have three stories with ramps. In London the vehicles go on small ramps from a spacious vestibule into the basement, then to the ground floor 1 metre above the courtyard level; into the first floor leads an unroofed ramp on the side of the building. Thus there are three co-ordinated ramps leading from a vestibule to the garages, the same ramp serving for driving out and in. In Paris there are motor sheds also on three different stories, and on the fourth floor are the shops. The ramp ascends in a straight line along the building up to the fourth floor with 10 per cent. elevation, and when the car reaches the level of the floor it turns into its garage. This ramp, serving for ascent and descent, is covered with a glass roof so that the garages get light from the ascending ramp.

None of the examples examined were considered to be quite worth imitation, as only in the top story is there light enough, and from the point of view of safety in traffic and fire-resistance they leave something to be desired. The delegates, however, saw what to avoid and that the problem is to be solved only with ramps, because the daily getting off of 500 cars—many of them, perhaps, driving out more than once a day—can only be managed without an elevator. Besides which it was clear to them that the cars must drive only in one direction and the ascending and descending cars must never meet one another.

In the beginning of 1914 sketches and a model were made. The double-way ramps running parallel were designed to run all round the building, and the entrance in the garages was arranged on the front. On the top story had to be sheltered the tricycles and letter-collecting cars, and it was therefore planned 5 metres narrower than the stories beneath. According to these principles the designs were finished in the middle of 1914, and in July were executed the public submission-discussions. In July, 1914, the Austro-Hungarian Monarchy declared war upon the Kingdom of Servia, and the Hungarian Ministry of Finance stopped all such works.

The war and the two revolutions prevented great building activity in Hungary, but as the economic state of the country had grown a little better, the Hungarian Post Administration took up its building work again and the garage was begun in the spring of 1923.

The plans fixed in the year 1914 were altered, the double-way parallel ramps which were originally unroofed and surrounded the two broad garages were provided with a glass roof and placed between the two garages. By getting the ramp between inside walls and roofing it, it can be used in good or bad weather. This arrangement made possible the suitable lighting of the winding ramps and the garages, and further, the garages are isolated and thus protected from fire. The area of the garages also became larger. This arrangement is shown on the accompanying illustrations.

The management of the Hungarian General Post Office have not patented the design, having regard to the interest of the community, and is always willing to show the building and the actual designs to foreign experts.

THE GLAMOUR OF BUILDINGS

A LANTERN lecture, dealing on broad lines with the subject of old buildings, was recently given by Mr. H. V. Molesworth Roberts at Winchester House, London. In the course of his remarks the lecturer said that he had prepared his lecture to connect up architecture with as many other subjects as possible, so as to elicit what was already a dormant instinct, and to show how inevitably architecture was involved in other studies. He spoke under the headings architecture and nature, architecture and the inanimate, and lastly architecture and humanity. Architecture, he said, related to life, and by reason of its origin, growth and structure was itself in some senses a living thing. First, nature's products formed the material from which the first buildings were made—the mineral kingdom supplied clay and stone, and plants beams and reeds, and the lecturer showed a special diagram illustrating the structural principle of these. Second, nature's tissues resembled architectural forms, and methods of laying masonry looked like parenchyma and vascular bundles. Third, nature itself attempted architecture; the Giant's Causeway showed geological formations of stupendous character, the groves of the forest are believed to have inspired lofty Gothic cathedrals. Fourth, natural forms were often copied in architecture, such as the two types of Gothic foliage, shown on the screen, and the special diagram of egg-forms in botany, pottery and architecture. Fifth, natural principles imbued buildings, such as the different sex characters, of which examples were shown, including the softening of the masculine and strengthening of the feminine elements by mutual influence.

Under the inanimate heading the lecturer referred to the mathematical lure—geometry, as seen in the working out of proportions, intended or otherwise, and the design of domes and vaulting, or arched ceiling; and mechanics, as seen in the careful arrangement of balanced thrusts, and the present vexed question of the dome of St. Paul's. Referring to the relation between architecture and other arts, the lecturer traced analogies between it, music and sculpture; while textiles also influenced design, the linenfold panelling of Tudor times resembling a box-pleated skirt; diaper, too, was copied from tapestry "d'Ypres" (from Ypres).

Humanity had always influenced the characteristics of architecture. For instance, humour was much in evidence—conscious, such as mediæval comic bosses and corbels; unconscious, as seen in the absurd mixing of Gothic and Rococo styles in the seventeenth century. Human longings came last. Romance and poetry in buildings were deeply rooted in human nature, as seen in charming cottages, moated mansions, and lonely ruins. Sacredness was seen again in beautiful homes, embodiment of family life; in the lofty expanse of cathedrals, and the rustic sanctity of parish churches.

Water-Colour Exhibition.

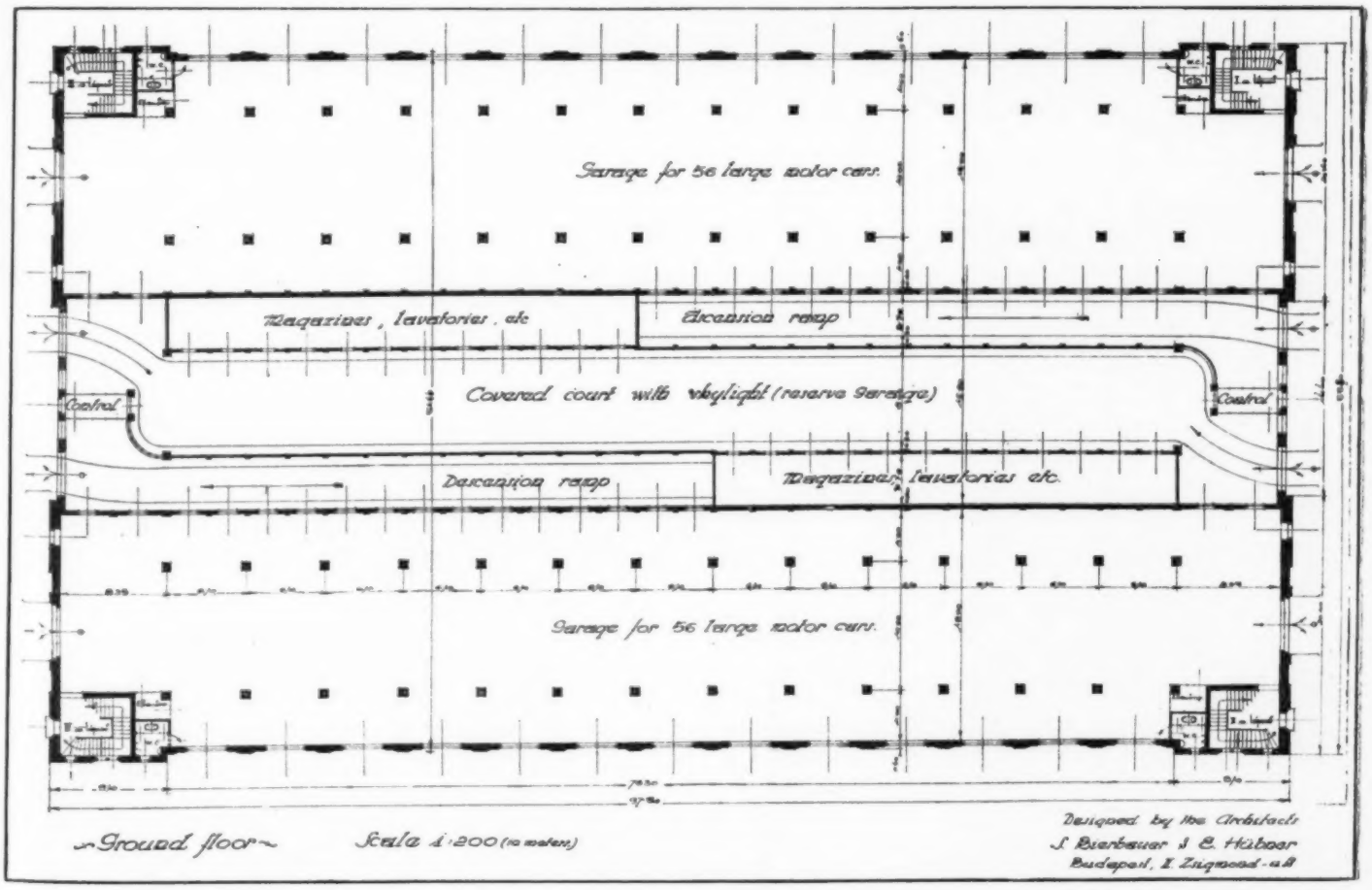
An exhibition of water-colour drawings will be held from March 23 to April 4 by Mrs. Philpot at Walker's Galleries, 118, New Bond-street, W.1. The exhibition is in aid of the National Industrial Home for Crippled Boys. Founded in 1866 with the object of training crippled boys to become self-supporting, the Home contains 100 beds and boards and clothes the boys for three years as well as teaching them a useful trade. A previous exhibition held by Mrs. Philpot in aid of this deserving work realised a considerable sum and it is to be hoped that the forthcoming exhibition will meet with the support it deserves.

STEEL HOUSES INQUIRY

THE Court appointed by the Minister of Labour to inquire into the causes and circumstances of threatened disputes in regard to the erection of steel houses was opened recently at the Institution of Civil Engineers, Great George-street, Westminster. Lord Bradbury presided.

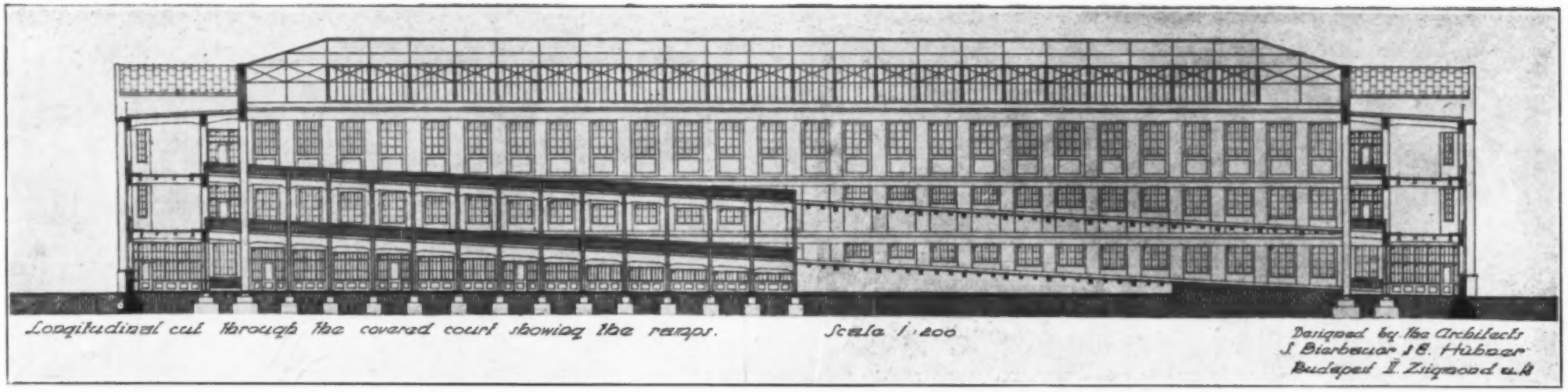
Lord Weir, in the course of his remarks, said in February, 1923, Mr. Bonar Law asked him to make suggestions to help the national housing situation. He reported that a solution might be found in a supplementary scheme involving a standard design of house with simplified operations, enabling unskilled labour to be utilised. At the beginning of 1924 he came to the conclusion that the use of concrete involved the employment of too much labour on the site, and that the organisation of a nation-wide scheme of building on a concrete basis would be very difficult. He then studied the possibilities of other materials, including the use of steel, but he found that all his designs involving an all-steel structure were too expensive. Finally, he turned to composite design involving a timber frame and steel sheeting, and he worked out certain designs on that basis. In June, the 1924 Housing Bill came before the House of Commons, and he prepared a large-scale model of a timber and steel house, worked out in detail, and this he showed to Mr. Wheatley (who warmly encouraged the whole scheme), and others interested. At the moment they had orders in hand for the supply of over 250 houses for different parts of Scotland, and unsigned contracts for 50 houses for England for demonstration purposes. Lord Weir, with the aid of a model, described the construction of a house, and said every separate and individual piece of timber used was purchased by the factory from local timber mills, already cut to length. No work on these pieces of timber, apart from assemblage, was done in the factory or on the site. The steel plates were supplied to the factory from the steel works. The work of the factory was to collect these parts and assemble them into various units. Even at this early stage in the development, six to eight operatives in six days could put together and deliver a house ready for occupation. He suggested that the work did not represent house building in the accepted meaning of the words. He also submitted that no craft skill whatever was required to be exercised in any of these operations, and accordingly they were able to utilise effectively as operatives, both in the factory and on the site, men chosen from the ranks of the unemployed. They could have engaged unemployed labourers, but on reviewing the situation they decided to give a definite preference to the employment of idle craftsmen of the trades which had been hardest hit by the present depression. In the Glasgow district, these trades were shipbuilding, engineering, iron and steel, and with regard to rate of pay, he said, after full consideration, they decided to adopt as a rate the engineering standard rate of the district. This rate was, if anything, over the average rate of the unemployed crafts in the district. They did not consider at that stage that they could be asked even to consider paying any of the building trade rates to these men, and they adhered to that view. A return of four weeks' working in their factories of about 1,000 engineering craftsmen, semi-skilled men and labourers, showed that, while the average standard rate would have been 55s. 4d. per week, the actual earnings averaged 73s. 7d. per week. They were confident that within a comparatively short time the Weir operatives, on payment by result, would achieve similar performances, which would mean that they would be earning as much as the building trade craftsmen. They proposed to give them the opportunity. On behalf of the firm, they denied emphatically any idea that this scheme was designed as an attack on the building industry. Their sole object had been to help on the solution of the housing problem.

View of Central Court before Completion

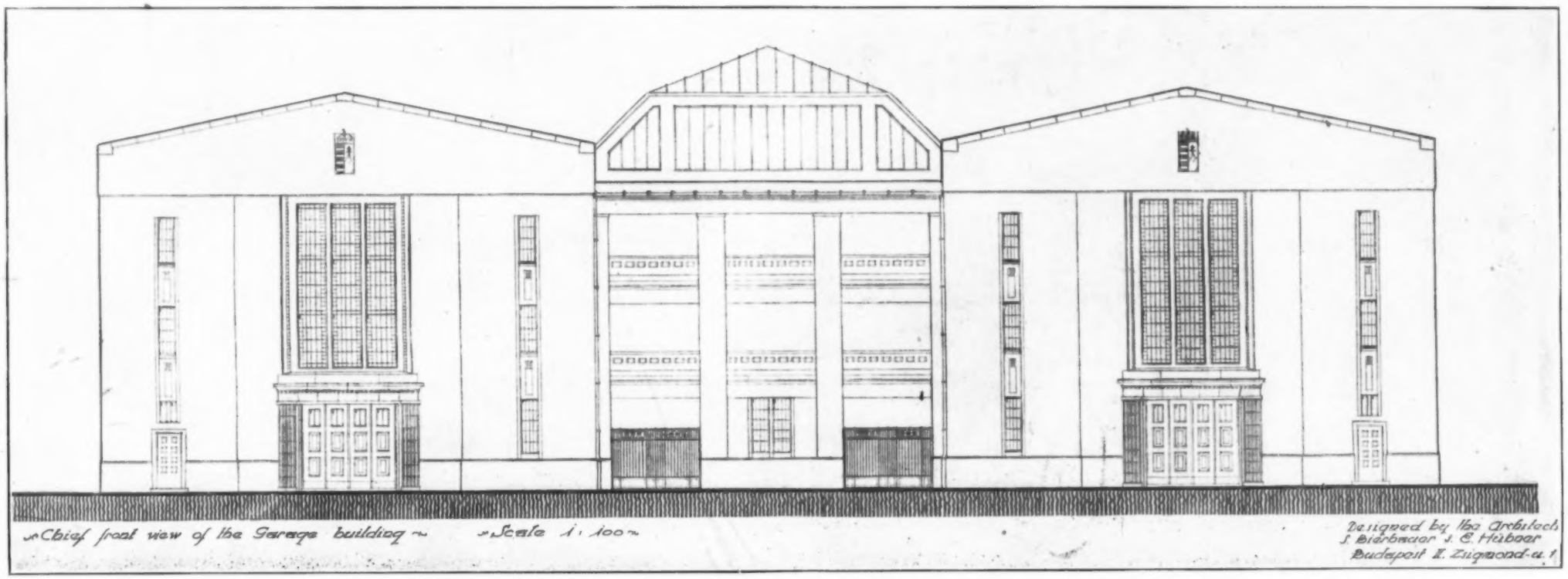


Plan.

Central Garage, General Post Office, Budapest. Messrs. J. Bierbauer & E. Hubner, Architects. (*See p.* 498.)


Longitudinal cut through the covered court showing the ramps.
Scale 1:200
Designed by the Architects
S. Bierbauer & E. Hübner
Budapest II. Zsigmond u. 1

LONGITUDINAL SECTION.


Chief front view of the Garage building
Scale 1:100
Designed by the Architects
S. Bierbauer & E. Hübner
Budapest II. Zsigmond-u. 1

FRONT ELEVATION.

Central Garage, Post Office Buildings, Budapest, Hungary. MESSRS. S. BIERBAUER & E. HUBNER, Architects. (*See p.* 498.)

LEGAL SECTION

NOTES ON CURRENT CASES

Specific Performance.

A CURIOUS point arose in the recent case, Berners *v.* Fleming (1925, 1 Ch. 39), in connection with an action to obtain specific performance of a contract for the purchase of property sold by auction.

The plaintiff was the vendor who had put up for sale by auction certain properties in the neighbourhood of Oxford-street and Newman-street. The lot in question was Lot 10, which had no frontage to either Oxford-street or Newman-street, but had access to these streets by two passages, that out of Oxford-street being known as Perry's-place, and that to Newman-street being known as Newman-yard. Lot 10 was physically two buildings, as it was divided by an internal wall into two buildings, one having access to Perry's-place, the other to Newman-yard. The soil of the former was included in the sale in Lot 1, and of the latter in Lot 9. Lot 10 was let on lease at the time of sale. The particulars of sale stated "The purchasers of lots 1, 3 and 10 will be granted an easement of a perpetual right of way over the roadway leading from Oxford-street to Perry's-place subject to similar obligations to those which are set out in the leases under which the premises comprised in these lots are now held. The purchasers of lots 4 to 11 inclusive will be granted an easement of a perpetual right of way into Newman-yard from Newman-street subject to similar obligations to contribute to the repair of the gateway, passage, and yard to those contained in the leases under which the premises comprised in those lots are now held."

One of the conditions of sale provided that where it appeared by the particulars that any lot was offered for sale subject to any easement or right for the benefit of other lots the conveyance of both the servient and dominant lot shall be framed accordingly, and in cases of difference as to the nature and extent of any such easement or right, or as to the form or mode of giving effect in the conveyance to any purchaser of any grant, reservation, or covenant, the same shall be determined by the vendor's solicitors. The vendor's solicitors had drawn a clause which conferred "a full right of way . . . to go, pass and repass, along, over, and upon the roadway from Oxford-street, coloured brown on the said plan, and the gateway and roadway leading from Newman-street, coloured green on the said plan, in perpetuity as the same are now or can be used and enjoyed under, or by virtue of, the lease hereinafter referred to, but not further or otherwise," which meant a separate right of way to each half of the building as then divided into two, whereas the purchaser contended he was entitled to the two rights of way to the whole lot 10. The purchaser had accepted the title, but refused to accept the grant in this form, and the vendors had then brought this action for specific performance of the contract.

The Court construed the contract in favour of the purchaser's contention as conferring the two rights of way to the whole building, or lot, as sold, but on the ground that the contract as construed by the Court was not the contract as interpreted by the plaintiff, and sought to be enforced by him, refused an order for specific performance. At the trial the plaintiff, after the contract had been construed by the Court in a contrary sense to what he had contended for, had asked the Court to enforce it as construed by the Court, but the Court held that this being a totally different contract to that which the plaintiff had sought to enforce, the application could not be granted.

The plaintiff appealed (see *Weekly Notes*, 28 February), and the Court of Appeal allowed the appeal. The Court held that the only contract the plaintiff throughout had been endeavouring to enforce was the written contract which admittedly had been made between him and the defendant, and although the plaintiff had taken a mistaken view of the effect of the contract, and had insisted upon that view down to, and at the hearing, that was the first occasion on which the true construction of the contract could be ascertained and where, as here, there was a perfectly *bona fide* dispute as to the interpretation of conditions of sale by auction, it would be an unduly strict view to take of the position of a vendor that he could not seek to enforce his view of the written contract without losing his right to enforce it at all. The Court cited as supporting this Preston *v.* Luck (1884, 27 Ch. Div. 497), London and Birmingham Railway *v.* Winter (1840, 1 Cr. & Ph. 57), and Smith *v.* Wheatcroft (1878, 9 Ch. Div. 223).

The Court also pointed out that no case had been cited to the effect that where the plaintiff had put a wrong interpretation upon the contract he thereby forfeited his claim to specific performance of the contract as rightly interpreted if he was willing so to modify it, but the following authorities rather pointed to the opposite conclusion: Fife *v.* Clayton (1807, 13 Ves. 546), Gwynn *v.* Lethbridge (1898, 14 Ves. 585), and Martin *v.* Pyecroft (1852, 2 De. G. M. & G. 785). We mention these authorities because in the Court below the learned Judge remarked that no authorities had been cited to him in favour of the plaintiff's contention that the contract as construed by the Court could still be enforced. The Court of Appeal also pointed out that the defendant had offered to take a conveyance if the construction he put upon the contract was accepted, which offer must be taken as subsisting down to the hearing (Hippgrave *v.* Case, 1885, 28 Ch.D. 356), and the plaintiff had at the hearing, in view of the fact that the interpretation he had put upon the contract was not the correct one according to the view of the Court, then accepted that offer and had submitted to pay the costs of the action and, therefore, the defendant had no right to complain of being held confirmed in his purchase on the true terms of his contract and his offer so to complete it.

This case may be compared with Allsopp *v.* Orchard (1923, 2 Ch. 323; *The Builder*, July 27, 1923), where specific performance was sought of a contract contained in certain letters, and a valuation, for the purchase of a rectory house and the glebe, and the court held that this contract was not established because the documents pointed to a different contract, the sale of the rectory house and glebe, subject to the vendor reserving an undefined area of about three acres, and the defendant, the proposed purchaser, taking over certain unascertained fixtures. At the hearing, the vendor's counsel offered to abandon and release all reservations which had been in the vendor's favour and to take specific performance of the contract as amended entirely in the defendant's favour, but the Court declined to grant a decree on such terms. The distinction between that case and the case now decided by the Court of Appeal appears to be this—in the latter case the contract itself was not in dispute, but only the interpretation of certain clauses in it, and if one interpretation was put upon this clause, the defendant had offered to take the conveyance. In Allsopp's case, the defendant contended that he never contracted as alleged by the vendor, and there never existed a contract in the terms sued upon, and he succeeded in that defence. Therefore, as the Court pointed out, it was not competent for the vendor or the Court to hold the purchaser to some other alleged contract which had not received consideration by the Court. Thus the judge is reported as having said, "There is no real analogy between a case of this kind where the vendor has failed to prove a concluded contract and the cases in which a vendor, having established the existence of the contract is at liberty, if he be so disposed, to take less than he is entitled to insist upon when he comes to have the contract specifically enforced."

Workmen's Compensation.

In our issue for September 26, 1924, we noted the first case (Davies *v.* Gwauncaegurwen Colliery), to be decided on section 7 of the Workmen's Compensation Act, 1923, which provides "For the purposes of the principal Act an accident resulting in the death or serious and permanent disablement of the workman shall be deemed to arise out of and in the course of the employment, notwithstanding that the workman was at the time when the accident happened acting in contravention of any statutory or other regulation applicable to his employment or of any orders given by, or on behalf of, his employer, if such act was done by the workman for the purposes of, and in connection with, the employer's trade or business." In that case, the man had gone into a prohibited part of the workings to take off his coat, and the Court of Appeal held that the man was not entitled to the benefit of the new provision, and, therefore, the claim by his dependants failed because the whole section is governed by the words at the end of it, that the workman must be acting "for the purposes of, and in connection with, the employer's trade or business, whilst here the man had gone into the prohibited area solely for a purpose of his own. In that case, the Court of Appeal intimated that the drafting of this new section would lead to much complication, and Lord Justice Atkin observed that there was a fatality in legislating on workmen's compensation, and this section might well prove a gilt-edged security for the legal profession, and this observation seems illustrated by the very recent case, Borley *v.* Ockenden (*Weekly Notes*, February 28), only at present reported very briefly.

In that case the respondent, a lad of seventeen years of age, was employed by the appellan, a bootmaker, as a finisher of boots and shoes, and his hours of work and occupation were confined to the time when he was on his employer's premises. The lad was anxious to become a repairer and thus earn higher wages, and on some four occasions the appellant's manager had allowed him to take boots to his home for the purpose of repairing them, but when the appellant had heard of this he had forbidden the practice to be repeated. Notwithstanding this, the lad had on a subsequent occasion taken boots home without the knowledge or permission of the appellant or his manager, and whilst working upon a pair of boots at his home, not as a finisher, but as a repairer, he injured his eye with an awl, and the eye had to be removed. The arbitrator had held the respondent entitled to compensation, for, although he was disobeying orders, the work was well done and calculated to further the employer in his business, and thus he was acting for the purposes of and in connection with his employer's trade or business.

The Court of Appeal allowed the appeal and the decision is very important. The Court held that section 7 must be read as one with section 1 subsection (1) of the principal Act; section 7 was intended to take away from the employer the three defences specified in the section (*a*) action in contravention of a statutory or other regulation, (*b*) action in contravention of orders given by or on behalf of the employer, or (*c*) action without instructions, but to entitle a workman who came within these categories to recover compensation he must first show that within the principal Act the injury arose out of and in the course of his employment. Applying this to the present case the Court held that the respondent was not within section 7; he was repairing boots by sewing, an operation not within his employment; he was doing it at a place where he was not entitled to work or employed to work—at his own home—and his

employer was not paying him and had no right to his services.

The section is very difficult to interpret and, like so many sections in the Workmen's Compensation Acts, will have to be construed "piecemeal" by the Courts. In Davies *v.* Gwauncaegurwen Colliery, Lord Justice Warrington indicated that the effect of the concluding words of the section was to confine its operation to acts done directly for the purposes of the employment and to exclude acts done merely incidental to the employment. Lord Justice Atkin in the same case intimated that there would be considerable difficulty in applying the section to the various cases which arise.

One of the cases in which the Court of Appeal in Davies' case intimated the section would clearly apply was Bourton *v* Beauchamp (1920, A.C. 1001; *The Builder*, June 25, 1920). That was a case where a shot in a mine was improperly treated contrary to a statutory regulation and we only refer to the case because we find that in our note on Davies' case, September 26, 1924, by an oversight the wrong facts are cited in connection with Bourton *v.* Beauchamp.

Workmen's Compensation: Operation of New Act.

Another decision involving a question under the new Act is Moakes *v.* Blackwell Colliery Co. (*Weekly Notes*, February 28), where a workman sustained injury by accident on October 29, 1920, and was paid compensation £1 a week and war additions up to January 1, 1924, when the new Act came into force, and he was paid 35s.: this, presumably, representing the weekly payment and the war additions, as section 1 preserves the war addition in respect of total incapacity arising from an accident which occurred before December 31, 1923, but makes it for all purposes part of the weekly payment, but the brief report at present available does not deal with that point.

The workman died on April 12, 1924, the employers then having paid in compensation a sum of £204 5s., thus leaving a balance of £95 15s. as the sum which the dependants could claim under the old Act of 1906 (Schedule I (1) (*a*) (i)), and this sum the employers had paid into Court. Section 24 subsection (2) of the new Act of 1923 provides, "No deduction shall be made under paragraph 1 (*a*) (i) of the First Schedule to the principal Act, as amended by section 2 of this Act in respect of the amount of any weekly payments made under the principal Act so as to reduce the sum payable in respect of the children of the workman under the said section 2, nor so as to reduce the amount payable under the principal Act below £200."

The county court judge had awarded £200, but the Court of Appeal held that section 24 subsection (2) under section 30, which provides that the provisions of sections 2 to 10 of the Act of 1923 shall not apply to any case where the accident happened before the commencement of this Act (January 1, 1924) made the new Act not apply, and the case was remitted in order that the award might be made for the sum paid into Court.

LAW REPORT

City Light and Air Action.

In this case, heard recently in the Chancery Division before Mr. Justice Romer, Messrs. Herbert Reeves & Co., solicitors, owners of the leasehold interest in 42, Old Broad-street, E.C., claimed an injunction to restrain an alleged threatened interference with the ancient light by the defendant, Mr. R. S. Charles, a surveyor, who is erecting new premises at 40 & 41, Old Broad-street, and 1 & 2, Union-court, E.C.

Mr. Hughes, K.C., for the plaintiffs, said it was not disputed that the plaintiffs' lights were ancient lights, and the questions to be decided were where, if the defendant's building was completed as proposed, there would be an interference with the plaintiffs' legal rights, and whether the proper remedy was an injunction or damages. The plaintiffs' premises had frontages on Old Broad-street, Wormwood-street, and Union-court. They paid £25,000 for the leasehold interest, but about three years ago they surrendered that and took a ninety-nine years' lease from the freeholders (the Skinners' Company), at an annual rent of £2,300, at the same time covenanting to rebuild the whole premises within fifteen years from now. The total site from Union-court to Wormwood-street was 3,000 sq. ft. The defendant's property was on the opposite side of Union-court, where he had pulled down the old building and had begun to rebuild. He was proposing to carry the new building up to a height of 57 ft. to the coping on the side facing Union-court, with a further 21 ft. 6 in. of roof with dormer windows. On the part facing Old Broad-street the front wall was to be 67 ft. and the roof 11 ft. 6 in. The result of this additional heightening would be a serious deprivation of the plaintiffs' light and a considerable depreciation of the rental value of their property. Many people in the City of London had to put up with bad light, and that was why well-lighted rooms had a special value. In addition to deprivation of skyline, there would be an actual loss of sunlight, if defendant's building was erected as proposed, because, except in Midsummer, no sunlight could reach the plaintiffs' windows.

Mr. T. H. Smith, architect and surveyor, of 17 & 18, Basinghall-street, E.C., gave evidence to the effect that he had done his best to form a comparison of the light in the rooms of the plaintiffs' premises when the defendant's old buildings were up with what it would be when the new building was completed according to the plans. His view was that, with the exception of the second floor, where the diminution would not be very serious, the rest of the building would be very seriously affected. You could only have adequate light for working purposes in that part of a room from which you could see the sky.

Mr. P. J. Waldram, civil engineer, architect and surveyor, of Dean-street and Buckingham-gate, who had made a special study of lighting, said he had arrived at the same conclusion as Mr. Smith, but by a different method.

Mr. Manning, K.C., for the defence, submitted that the important question to be considered was the locality, because it had been held that a man who carried on business in a populous town could not expect to have the same amount of light as a business man in the country. He contended that, after the defendant's premises were built, the plaintiffs would still have enough light for any ordinary business.

His Lordship: You say they would have the ordinary enjoyment of premises in the City of London?

Mr. Manning: Yes.

Sir Bannister Fletcher, architect and surveyor, King's Bench Walk, Temple, said the plaintiffs' premises were exceptionally well lighted, and in his opinion, after the defendant's building was erected, business could, for all practical purposes, be carried on as conveniently as at present. The plaintiffs' experts dealt with a standard of light which was obtained only in isolated buildings, such as elementary schools. It was an ideal state of existence which everybody wanted, but it could not be applied to the City of London. The doubling in height of the defendant's building must materially affect the plaintiffs' light, but not enormously.

Messrs. Paul Hoffman, architects and surveyors, of 62, New Broad-street, E.C., William Edward Riley, architect and surveyor, of Gray's Inn, Frederick Mitchell Shelt, valuer and surveyor, of St. Clement's-lane, E.C., and Mr. R. Stafford Charles, surveyor, Pinners' Hall, Old Broad-street, E.C. (the defendant), also gave evidence for the defence.

At the close of the addresses of counsel, Mr. Justice Romer, in giving judgment, said that the model of the defendant's proposed new building seemed to suggest very forcibly that the plaintiffs' rights would be so injured as to give them a cause of action, apart altogether from the question of whether a 45 deg. or a 63½ deg. test should be applied. He agreed with the plaintiffs' experts that the defendant's building would cause a considerable diminution of the light enjoyed by the plaintiffs' shops and offices. In the circumstances it appeared to him that the plaintiffs had proved their case They had shown that, if the defendant's building was erected, the reasonable, comfortable enjoyment of their rooms would be impaired, and that they would be substantially less comfortable for business purposes than in the past. It was true that the standard of light in London was not so high as the standard of light in the country, but it did not follow that, because people who had no rights as to light put up with inadequately lighted offices, the owners of ancient lights should submit to equal discomfort. He had come to the conclusion, without any hesitation, that the defendant's building would substantially injure the reasonable and comfortable enjoyment of the plaintiffs' rights, and the only question was whether it was a case in which he should grant an injunction or leave the plaintiffs to their remedy in damages. Well-lighted offices were an asset of considerable value and the injury to the plaintiffs' right would be a large one. It was impossible to ascertain with any degree of accuracy what would be an adequate monetary compensation for the discomfort the plaintiffs would sustain, and as the obstruction would be illegal, he thought he must grant an injunction restraining the defendant from erecting his building to such a height as to cause a nuisance to the plaintiffs. The defendant must pay the costs of the action.

R.I.B.A. Annual Dinner.

The annual dinner of the Royal Institute of British Architects will take place on May 12, at the Trocadero Restaurant.

Imperial Contracts.

In a recent circular to local authorities the Ministry of Health states that at the Imperial Economic Conference in 1923 the following resolution was passed:—

"(1) That this Imperial Economic Conference reaffirms the principle that in all Government contracts effective preference be given to goods made and materials produced within the Empire, except where undertakings entered into prior to this Conference preclude such a course or special circumstances render it undesirable or unnecessary.

"(2) That, so far as practicable, efforts be made to ensure that the materials used in carrying out contracts be of Empire production.

"(3) That State, provincial and local government authorities should be encouraged to take note of the foregoing resolutions."

Welsh Elementary Schools.

The Welsh Department of the Board of Education has just issued (in draft form) their new regulations as to the planning and building of public elementary schools in Wales. A descriptive circular states the introduction, over the signature of Sir Alfred T. Davies, reproduces the message which the retiring permanent secretary of the Welsh Department recently issued to Wales in connection with the observance of the national anniversary of St. David's Day. In it he urges the importance—which several of the new regulations themselves emphasise—of increased attention being paid in Wales to those æsthetic considerations, and the love of the beautiful, which are too often overlooked in the planning, furnishing, and other arrangements of a school. This involves, it is pointed out, no expenditure upon costly materials but depends rather upon the preliminary exercise of due care and good taste, considerations which apply, in an especial manner, to such matters as the selection and treatment of the site, the avoidance of ugly and unnecessary boundary walls or windows which obscure rather than admit the light, and the absence of either seats for rest or trees for shade in the school playground. The proper naming of schools, also, is a subject on which Sir Alfred Davies has some good advice to offer to school authorities.

As regards the regulations themselves, the principal alterations—apart from those which give effect, in the letter, to the spirit which animates the introduction—are those which embody the policy of the Board in requiring rather more space in the classrooms for teachers and pupils.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or better still, in typescript!—Ed.

Agreed Percentage.

Sir,—A contractor has built a house upon a percentage basis upon the net cost of the building. No special reference is made in the contract as to the painting and decorating of the house, but the contractor agrees to permit the execution of work by any other artist or tradesmen who may be engaged by the employer.

After the certified completion of the work by the local authorities the employer engages another person to do all the interior painting and decorating work. Is the original contractor entitled to the agreed percentage upon this subcontract? The approximate cost of the house amounts to about £2,500. Could it be held that the interior painting and decorating is not essential to make a house of this class fit for habitation?

"W. L. W."

Covenants.

[Reply to Bungalow, March 20.]

[The definition of a house must first be considered. It is a term similar to the term dwelling-house, and has been held to be a structure of a permanent character structurally severed from other tenements, and usually, but not necessarily, under its own separate roof. Again, it implies a building used, or capable of being used, as a residence by one or more families, also a permanent building in which the tenant or the owner and his family dwell or live. On the other hand, the term house, under various statutes and other instruments, has been held to include a collection of buildings used for one purpose, a building containing several residential flats where there was a covenant not to erect more than one house on a site each of two tenements, the one on the ground floor, and the other on the first floor of the same building, there being no intercommunication between them, and each having a separate front door. Also a school, a factory in which persons were employed, a workhouse, etc. When there was a covenant as to the number of houses to be erected on a piece of land, the term house was held to mean the whole physical erection or amalgamated building under its own roof, usually called a house without any reference to its interior arrangement. Further, it has been held that two houses with a common yard, water-closet, and ash-pit, are not one house; but under the Rep. People Act 1832, part of a house is now a house. A building intended for a dwelling-house which was never completed, but used as a store for straw and agricultural instruments, was held not to be a house.

It has been said that a little more than a century ago there was not much difficulty in saying what was a house; and that now, to understand its meaning, one must understand the subject matter with respect to which it is used. It is not at all clear, but it does appear from a consideration of the above, and on the facts stated, that the inquirer, either by himself or joined with other purchasers, is justified in applying to the Court for an injunction against the purchaser of the adjoining plot to restrain a breach of the covenant referred to. It is thought that in all the circumstances and on the cases, a Court of Equity would not hold the bungalows to be semi-detached, since they have no dividing wall common to both, are not under the same roof, but in fact are divided by stores which it is thought could not be held to be houses at all.—Ed.]

Sir,—A detached house must have a passage-way through at either side of the house, and upon the site of that house. A semi-detached house is one that has such passage-way upon one side only, and I am certainly of the opinion that the case quoted and illustrated by your correspondent would rank as of the semi-detached type. Actually a house of which one side wall is built upon one of its boundaries would rank as semi-detached even though no house was attached thereto. I came across a law case a few months ago in which this fact was of great importance.

"Observer."

White Walls.

Sir,—I have recently had a house built. According to the builder's specification the outside walls are formed in "our mottled purple stock facings." The walls or bricks seem to be quite white. I've tried to rub it off but there does not appear to be anything to brush away. Can any reader tell me the cause of this? Is there any fault at all?

P. Packman.

Septic Tank.

[We have sent a further reply to "Research" by post.]

Gas Fumes.

Sir,—I recently wanted to disperse the fumes of a gas cooker so that those operating the cooker would not suffer. I suggested a pipe into the open air, but the gasfitter pointed out that if I did so, there was a possibility of down blow and the consequent possibility of the gas jets being blown out, so the window has to be open for fumes to escape. I notice that many new buildings have a channel up the wall to take the fumes from a gas stove or cooker. The channel, I understand, terminates under the roof of the house. Are these fumes expected to disappear between the slates of the roof, or do they disperse themselves in the house? Can you tell me what is the effect upon the health of the inhabitants, and what, if any, effect these gas fumes have upon metal work in the house?

H. Teeling Smith.

Improved Hollow Walls.

Sir,—I understand there has recently been put on the English market particulars as to a method for "Improvement in building with hollow walls for heating purposes." I shall feel very much obliged if you can enlighten me on this subject by giving me the name and address of anyone from whom I am likely to secure information.

F. G. Bailey.

Cleaning Brickwork.

Sir,—Can you give us a recipe for cleaning red brickwork that is stained with rain water and generally very dirty? We have such a job to do, and are a little at a loss as to the best method to adopt.

Northfield & Co.

Brick Wall Construction.

Sir,—I should be well instructed and interested if any of your correspondents could inform me of the relative strengths to resist crushing, of an ordinary 9 in. brick wall in lime mortar, a cavity 11 in. wall in lime mortar, with wall ties every fourth course and 3 ft. apart, but with the cavity filled in, as the work rises four courses, with waterproofed cement 4 to 1, and finally of a similar cavity wall but with the cavity left open. In each case it is to be assumed that the wall will be 8 ft. high and that the load is upon the inner 4½ in. of the same. In the second case, the wall cavity would be filled in before the mortar had set, in which case I suggest that the wall might be assumed to be homogeneous.

"Experiment."

THE RENT RESTRICTION BILL

There can be no doubt that the Government have adopted a statesmanlike course in confining the Bill introduced to continue the first part of the Rent Restriction Act, 1923, simply to the prolongation of the period for a further two and a half years. For ten years house property has become the sport of certain sections in the House of Commons, and the fact that it is private property and not the property of the House of Commons has almost been lost sight of. Also, the fact that the great difficulty in getting houses offered to tenants at all has entirely arisen from the statutory interference between landlord and tenant. It was an admitted fact that some continuation of the present legislation was a necessity at the present time, and the Bill which provides for a limited specified period, but which can be continued if occasion arises by inclusion in the Expiring Laws Continuance Bill, is calculated to produce the least possible disturbance in existing conditions.

The amendment moved by the Opposition probably was chiefly directed to get rid of the partial and very gradual de-control provided by section 2 of the Act of 1923, but the resolution also contained a criticism which seems almost ironical, seeing it comes from the authors of the hastily patched up Prevention of Eviction Act of last year, that the present Bill "contains no provisions for simplifying existing legislation in order to avoid litigation." We do not know whether the draft Bill prepared by Mr. Mardy Jones, a summary of which appeared in the same issue of the *Times* which contained the debate on the Government Bill, represents a measure such as was indicated in the above amendment, but it is typical of Rent Restriction measures, and we can only hope now that the less noxious amusement of cross-word puzzles has come into vogue, reformers may be tempted to turn their attention to this form of intellectual activity rather than practise their wits on Rent Restrictive measures.

We are glad to see that the Minister of Health was able to say that on the whole landlords were not taking unfair advantage of the provision as to decontrol where they came into possession of their own property under section 2 of the Act of 1923. Mr. Wheatley referred to this small measure of decontrol as "bleeding to death" control under the Rent Restriction Acts, and described the present Bill as a "Decontrol Continuation Bill"; but so long as rent restriction is universal and tenants are "landlords' fixtures" under the Act, it is obvious that this statement must be an exaggeration, for the section only comes into operation where the landlord comes into actual possession in the fullest sense of the term, and as we have recently shown, a case in the Law Courts has prevented this provision from being taken advantage of, even where a tenant has left the premises by a midnight flitting without paying rent, and the landlord without taking formal possession had re-let the premises to another tenant. As to Mr. Wheatley's point as to the cost of repairs, he must be aware that the cost of both building and repairs was lower when he took office than they are at the present time, and that the rise in the cost of both was a cause of anxiety to him in connection with his Housing Act before he left office, and that so long as housing has to be pressed forward there can be no substantial reduction in the cost of repairs, but rather an increase must be expected. His threat to expose to the public the principles of this Bill, which is but a continuance of measures in force during his own term of office, may lead to a simple comparison between his acts when in office and his principles in opposition.

Builder's Estate.

Mr. Edward Kelly, of Beech Lodge, Watford, Herts, builder (net personalty £142,736), £245,147.

THE BUILDING TRADE

ARBITRATION IN BUILDING DISPUTES

By W. T. CRESWELL, Lic.R.I.B.A.,
Assoc. (late Fellow) Surveyors' Institution, F.R.San.Inst., Barrister-at-Law.

VIII.—PROCEDURE ON THE HEARING—(2).

Taking Notes of the Evidence.

THE arbitrator should, himself, throughout the proceedings, take careful notes of the evidence given by the witnesses on both sides. He may then compare what they say on examination in chief, with what they admit on cross-examination; also, what one witness states, with those statements made by another witness. Also, he may, in some subsequent proceedings arising out of the reference, wish to refresh his memory from the notes. It is doubtful if he can direct shorthand notes to be taken at the cost of the parties; though the latter may agree, in important cases, to shorthand notes being taken and a transcription being furnished to the arbitrator, who may be requested by the parties to make an order in his award as to which party shall bear the cost.

Costs of taking shorthand notes and making transcriptions, &c., cannot be recovered in the High Court, on taxation of costs against the party liable to costs, without the direction of the Court.

Stamps on Documents.

When an agreement or other document is produced before the arbitrator, it is his duty, if it is put in to support the case, to see that it is duly stamped if subject to a stamp duty, under the Stamp Act, 1891. If it is unstamped, or insufficiently stamped, the arbitrator must require a deposit, with him, of the necessary stamp duty, together with a sum of £10 to cover the penalty, before he allows the document to be put in evidence. He must do this, even if both parties are willing to dispense with the stamping, giving a receipt for the money, which is to be accounted for to the Commissioners of Inland Revenue.

The Oath or Affirmation.

It is usual for the arbitrator to administer the oath to all witnesses giving evidence. Section 7 of the Act gives power to an arbitrator or umpire to have evidence taken on oath or affirmation, though it is not compulsory on them to do so.

The following are the forms of oath and affirmation:—

The Oath.—"I swear by Almighty God that I will true answer make to all such questions as shall be asked of me touching the matters in difference in this reference."

The Affirmation.—"I solemnly, sincerely and truly affirm and declare that I will true answer make to all such questions as shall be asked of me touching the matters in difference in this reference."

If the submission requires the evidence to be on oath, the formality may not be dispensed with, without the consent, express or implied, of the parties; but the fact that witnesses were not sworn, no objection being made before the arbitrator at the hearing, will not set aside an award. See Biggs *v.* Hansell (1855), 16 C.B. 562.

False Evidence.

By Section 22 of the Arbitration Act, 1889, it was provided that false evidence given on oath or affirmation is perjury; and that the person guilty of wilfully giving such evidence, may be prosecuted and punished. This section, however, was repealed by the Perjury Act, 1911, Section 1 of which makes the crime punishable by the infliction of a fine, and imprisonment.

Witnesses Free from Arrest.

Witnesses subpœned to attend the hearing have the same freedom and privilege from arrest, both on going to and returning from the hearing, as a witness appearing before a Court of Justice. See Webb *v.* Taylor (1843), 13 L.J., Q.B. 24.

The Arbitrator to Hear all the Evidence.

In general the arbitrator is bound to hear all the evidence, and to examine all the documents produced by the parties, even though he may be of opinion that sufficient evidence, &c., has already been produced. When, however, he is a man of special knowledge and skill, and has been chosen because of those attainments, and in order that the parties may have the benefit of those qualities, and he rejects material evidence, the Court will not set aside the award. In Johnson *v.* Cheape (1817), 5 Dow 247, the submission referred to the fact that the arbitrator had been chosen on account of his skill and knowledge of the subject. One of the parties to the dispute brought to him a statement of facts which he alleged to be material to the issue, and which he offered to support by proof. The House of Lords held that the arbitrator was justified in refusing to receive the statement, if on taking it into account, and with his own local knowledge to guide him, he felt that the statement of facts would have no effect upon his decision.

Whether the Arbitrator Should Call a Witness.

It is a breach of duty for an arbitrator to himself call a witness as to facts, unless with the consent of the parties. *In re* Enoch and Zaretzky, Bock & Co. (1910), 1 K.B. 327, where an umpire called a witness himself, and refused to allow an adjournment in order to enable a party to give evidence to test that of the witness whom the umpire himself had improperly called, the Court remitted the matters in dispute to the arbitrators to appoint another umpire. Lord Moulton said, "It is certainly not the law that a judge or any person in a judicial position, such as an arbitrator, has any power himself to call witnesses to fact against the will of either of the parties. There may, in some cases, be a person whom it would be desirable to have before the Court, but neither party wishes to take the responsibility of vouching his personal credibility, or admitting that he is fit to be called as a witness. In such a case the judge may relieve the parties by letting him go into the box as a witness of neither party; and, of course, if the answers are immaterial he may refuse to allow cross-examination."

The Arbitrator Obtaining a Legal Opinion.

When during the course of the reference a legal opinion is taken by the arbitrator, the case for opinion should first be shown by him to the parties. If he obtains an opinion based on an erroneous statement of facts and then acts upon it the award may be set aside. See *in re* Hare and Milne (1839), 6 Bing N.C. 158.

The Arbitrator to Decide as to a "Custom."

When a contract provides that "any dispute on the contract shall be settled by arbitration in the usual way," the arbitrator has jurisdiction to decide finally the question of the existence of a custom affecting obligations under the contract, and if such custom is not inconsistent with its express terms. See Produce Brokers Co., Ltd., *v.* Olympia Oil and Cake Co., Ltd. (1916), 1 A.C. 314, overruling *in re* North Western Rubber Co. and Hüttenbach & Co. (1908), 2 K. B., 907 C.A., and Hutcheson *v.* Eaton (1884), 13 Q.B.D. 861 C.A.

The Close of the Proceedings.

An arbitrator should not act hastily in closing the proceedings. So, if a party is taken by surprise by an unexpected case set up by the opposing party, and asks for time to enquire into the matter, the arbitrator should give a reasonable opportunity for its investigation by the party requiring the time. See Solomon *v.* Solomon (1859), 28 L.J. Ex 129. In any case, he should make it quite clear to the parties when the procedings at the reference are closed. This is usually done by the arbitrator informing the parties that he will make his award in due course. In certain cases the award may be set aside, as when having promised to hear some witnesses he makes his award without calling them; or when, having previously declared that he would take no further proceedings in the reference till some books of account have been looked into, and examined, he makes his award, without giving notice to the parties that he has found the inspection of the books, &c., unnecessary. See Earl *v.* Stocker (1691), 2 Vern 251, and Pepper *v.* Gorham (1820), 4 Moore 148.

Until the arbitrator has made his award, either party can make an application to him, and the arbitrator must deal with it. This is so even when the case has been formally closed; for it is in the discretion of the arbitrator to re-open it, and receive further evidence. Should the case for any reason have been referred back to him, he must hear any additional evidence that is tendered. See Bignall *v.* Gale (1841), 2 M. & G., 830, and Nickalls *v.* Warren (1844), 6 Q.B. 615.

If application is made to him the arbitrator has a discretion to allow amendments in the claim or defence during the reference, unless contrary to the terms of the submission; but be cannot allow a fresh dispute to be introduced as an amendment, which is not covered by the submission, unless the parties agree thereto in writing. See Wilson *v.* Conde d'Eu Railway Co. (1887), 51 J.P. 230. Amendments should, in general, be allowed if no grave or manifest injustice is done; and if there is any doubt, the party wishing for the amendment should be ordered to pay the costs.

Costs.

The First Schedule of the Arbitration Act, 1889, gives the arbitrator a discretion as to costs. He has no power to require the parties to give securities for costs, unless the submission so provides. See Lanza *v.* Wiener (1917), 2 K.B. 558.

Extermination of Rats.

We have received from the publishers a book by Mr. Mark Hovell, F.R.C.S., on "Rats and how to destroy them." In an introduction Mr. S. L. Bensusan states tha Mr. Hovell is, in the opinion of those who know, the greatest living expert on the subject, and is a man who knows every aspect of country life, and every trick practised by the rat. Five and twenty years have passed, Mr. Bensusan states, since the author first began to wage war on rats, learning all that many gamekeepers, professional rat-catchers, and a collection of clever dogs could teach him, and even becoming passably expert in trapping. Perusal of Mr. Hovell's book confirms this opinion, and we believe the work is the most complete and reliable book on rat-destruction ever printed, whether in English or any other language. (John Bale, Sons & Danielsson, Ltd., 83-91, Great Titchfield-street, London, W.1. Price 11s. 3d.)

Madame Tussaud's Demolition.

Messrs. Mullen & Lumsden, Ltd., 41, Eagle-street, Holborn, W.C.1, inform us that they have secured the contract for the shoring and pulling down work in connection with the dangerous structure notice served in connection with this building.

BUILDING EDUCATION

A CONFERENCE of building teachers recently took place at Marlborough House, Ilkley, with regard to building craftsmanship, building research, and apprentice and higher forms of technical training and instruction. The meetings were arranged by the Board of Education. A number of representative members of the building industry, including Sir Edwin Airey of Leeds, Mr. Reeves Charlesworth of Sheffield, Alderman Burch of York, and Mr. Davidson, secretary of the West Riding Federation of Building Trades Employers, were present.

At the opening meeting, the chairman, Mr. A. R. Sage, of London, expressed his appreciation of the opportunity afforded him of meeting so many North Country teachers of building; he emphasised the great importance of these periodic conferences between technical teachers, and between them and the industry in which most of their students found their life's work.

In dealing with the position of the craftsman in building, both in the past and also to-day, Mr. J. L. Manson, H.M.I., pleaded for a broader and more imaginative handling of the instruction of apprentices. It was important that such instruction should be closely related to modern conditions and modern needs; some of the demands so created had a deadening effect upon craftsmanship, but he thought they could do much to encourage a respect and a love for sound craftsmanship by giving more attention to the best craft work which had been done in the past or which was being turned out to-day. The idea of the industry and the technical schools acting as partners in this matter of craft improvement was being increasingly recognised. Alderman Burch, in a short speech at a later stage in the conference, emphasised this point, and expressed the hope that teachers would realise the great opportunities open to them in this respect. Mr. Dean gave the conference details of the apprenticeship scheme for building apprentices in Liverpool, which has been successfully started recently; nearly 150 apprentices were now attending in the daytime.

In the absence through illness of Dr. R. E. Stradling, Director of Building Research, his paper on "Building Research and Education" was read by Mr. H. H. Burness, of Bradford. Dr. Stradling, after briefly outlining the development of modern methods of construction, urged the importance of research as one of the most effective means by which knowledge and experience could be acquired upon a scientific basis, so as to be available for dealing with the difficult problems which were arising out of the use of new materials and new methods of construction. In this work the importance of scientifically educated workers, supervisors, and designers was very great. There was a great need for a forward step in the application of scientific principles to building problems, both simple and complex. It was to be hoped that the scope of the subject of building science would be greatly extended in the near future. The circulation of the summarised results of research work was also a question which must be investigated.

Sir Edwin Airey deplored the lack of public appreciation of the need for research into building problems. This country compared very badly with America in this respect, where ample means were provided to carry on all the research work that appeared to be necessary. In this matter of research and of improved scientific education in building, he believed that the building industry would be prepared to give practical assistance, if the great need were put before them. In dealing with the present problem of building labour, he believed that little real progress would be made until each side—employers and men—put their house in order. In spite of what was being said to the contrary, he believed that, given reasonable conditions, the British workman in building could more than hold his own with men in the same occupation in other countries.

At the final meeting of the course, Mr. L. A. Gerrard, of Manchester, spoke on the need for adjustments in education to meet the changes, in methods and materials, which were taking place in the industry. The introduction of power, the increasing use of machinery, and the relatively high cost of labour were effecting considerable changes in the organisation of the industry. The joint stock company was beginning to replace the small employer, and was increasing the demand for suitably trained supervisors, managers and foremen. Some of these changes were making it increasingly difficult to provide proper training for apprentices. In these matters he believed that the field for real, progressive technical education was very great. It was impossible that in future they could hope to draw men suitable for the higher posts from the craftsmen, as they had in the past. Men with special training and a broader outlook were really essential, and this was one important group for which improved educational provision must be made. Similarly, in providing instruction for apprentices they must keep in mind the changes which were taking place in the industry.

Mr. Hugh Davies, H.M.I., spoke of the great interest which the Institute of Builders was taking in the two aspects of building education to which Mr. Gerrard had referred, viz., for the craftsman and for the builder, employer, or supervisor. He also mentioned the changes in constitution which the Institute had discussed, and which were intended to open the membership of the Institute to all those interested in building who were suitably qualified, either by reason of their employment in building or educational work associated with it, and who had passed the examinations of the Institute.

The conference was brought to a close by an inspiring address by Mr. Reeves Charlesworth, who, in outlining the progress of building education in recent years, gave a succinct account of the joint scheme for building apprentice training which the masters and men in Sheffield succeeded in establishing some years ago. A recent additional effort was the provision of a fine stock of building books in the public reference library in Sheffield, and the preparation of a special catalogue, a copy of which was given to every apprentice employed in the building trades in Sheffield. The Building Education Asscciation which had now been established in Yorkshire was engaged in an attempt to establish something like uniformity of standard and suitability in the character of the courses and examinations provided in that county in building. Quite recently, the West Riding Federation of Building Trades Employers had by resolution indicated their readiness to support such schemes of instruction as soon as ever they were established. In summing up the work of this very successful course, Mr. Manson suggested that the outstanding feature of their discussions had been the emphasis laid upon the need for technical instruction which was in close touch with modern conditions. The new and marked interest which the leaders of the building industry were showing in educational work, and the encouraging increase in the number of students of building subjects, ought to enable them to offer courses of instruction which were both more varied and more effective than some of those at present in existence. What might be called the old spirit of craftsmanship and the new spirit of science, about which they had been speaking, were necessary and should be found in all types of courses which they might be able to introduce. Probably their greatest immediate difficulty lay in the establishment of sound instruction in science for building students; at present equipment, teaching power, and the general conception of the scope of such work were quite inadequate. A start had, however, been made, and the clear indications which they had received at Ilkley that the industry, and all other bodies interested in effective technical education, were behind them in these matters should assist them enormously in the future.

NEW BUILDINGS IN LONDON

Bishopsgate.—Foundation work is well in hand on the site of the new premises in Bishopsgate, E.C., for Messrs. The Hudson's Bay Co., Ltd. The general contractors are Messrs. Dove Bros., Ltd., Cloudesley-place, Islington, N.1. The architects are Messrs. Mewès & Davies, 22, Conduit-street, W.1. The quantity surveyor is Mr. F. A. Henneker, Adelphi Terrace House, W.C., and the consulting engineer, Dr. Oscar Faber, 5, Southplace, Finsbury Pavement, E.C.

Camberwell.—Extensive alterations at the Camberwell Empire Theatre, S.E.5, have been approved by the L.C.C. Theatres and Music Halls Committee. The architect is Mr. Clifford Aish, 22, Bedford-street, Strand, W.C.2.

Charing Cross.—The old premises at No. 16-20, Charing Cross, S.W.1, occupied by Messrs. Cox & Co., the bankers, have been acquired by the National Bank, Ltd., of Old Broad-street, E.C., who propose to use them as their West End branch.

Hamilton-place.—An additional story is to be added to the flats at Nos. 8-9, Hamilton-place, W.1, in order to provide two extra suites. The architects are Messrs. Charles Heathcote & Son, of 38, Parliament-street, S.W.1, acting on the instructions of Messrs. Grogan & Boyd, of 10, Hamilton-place, W.1.

Acton.—The Metropolitan District Railway Company propose to acquire about 13.144 acres of land for the purpose of extension. A large range of single-story "north light" buildings will be erected. The plans are by the company's chief architect, Mr. S. A. Heap, of Electric Railway House, St. James's, S.W.1.

Regent-street.—New shop and showroom premises are to be erected at No. 113, Regent-street, W.1, at the corner of Vigo-street, for Messrs. Austin Reed, Ltd. The architects are Messrs. P. J. Westwood & Emberton, 7, Adam-street, Strand, W.C.

Woolwich.—An extension, comprising a bacteriological laboratory, is to be erected at the Woolwich Infirmary, S.E.18, for the Board of Guardians. The plans have been prepared by Messrs. Whincop & Channer, 47, Thomas-street, S.E.18, and show a building of brick erection.

Blackfriars-road.—A new garage and stores is to be erected in Webber-street, Blackfriars-road, S.E.1, for Messrs. David Greig, Ltd., provision merchants. The architect is Mr. H. Payne Wyatt, 465, Brixton-road, S.W.9. The contractor is Mr. J. Parsons, 190, Waterloo-road, S.E.1.

Regent-street.—Messrs. Holloway Bros. (London), Ltd., Bridge Wharf, Grosvenor-road, S.W.1, have secured the contract for the erection of the new head offices at the corner of Regent-street and Glasshouse-street, W.1, for the County Fire Office. The architects, acting in a joint capacity, are Messrs. William Woodward & Sons, 15, Great James-street, W.C.1, and Ernest Newton & Sons, 4, Raymond Buildings, W.C.1.

Poultry.—Demolition of the old buildings occupying the site in Poultry of the new head offices for the Midland Bank, Ltd., is now being carried out by Mr. B. Goodman, of 33, Haggerston-road, E.8. The new building will be six stories high and will cost about £500,000. The plans have been prepared by Messrs. Gotch & Saunders, of Bank Chambers, High-street, Kettering, and Sir Edwin Lutyens, R.A., Queen Anne's Gate, S.W.1, acting in a joint capacity.

Golders Green.—The new and permanent Unitarian Church of All Souls, together with a church hall, &c., is about to be erected in Hoop-lane, Golders Greeen, off the Finchley-road, in red brick with Portland stone dressings, in a free rendering of the Byzantine period, and is to cost approximately £5,000. The general contractors are Messrs. Runham Brown Bros., of Clapton, and the steelwork by Messrs. Albert Bridle, 72, Victoria-street; the architects are Messrs. G. Reginald Farrow, F.R.I.B.A., and Sydney R. Turner, Amberley House, Norfolk-street, Strand, W.C.2.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

Smoke Abatement.

Mr. N. Chamberlain informed Mr. Young and Captain Reid that he hoped to introduce a Smoke Abatement Bill next session.

Houses Built in 1924

Mr. N. Chamberlain informed Captain Waterhouse that the number of houses completed with State assistance under the Housing Acts during the year ended December 31, 1924, was :—

Local authorities' schemes	17,275
Private enterprise schemes	35,455
Total	52,730

Returns as to building by private enterprise without subsidy were obtained half-yearly, in March and September. During the year ended September 30th last, 73,032 houses were so provided. He was hopeful that the total output of houses in the coming year might exceed the number erected in any pre-war year.

Cost of Weir Houses.

Mr. N. Chamberlain informed Captain Foxcroft that it would not be possible to make any final comparison of costs between Weir houses and brick houses until the Weir houses were being produced and erected in considerable quantities, but he hoped that the experiments to be carried out would demonstrate at once that these houses could be provided for occupation in a much shorter time than ordinary brick houses.

Bricklayers and Trowels.

Captain Waterhouse asked the Minister of Health if he was aware that men employed on the Leicester Corporation housing contract were forced to use pieces of wood or slate to lay the cement bedding for concrete blocks, owing to the fact that the bricklayers' union would not permit them to use trowels; and, in view of the fact that this action was prejudicial to the weather-proof quality of the work, impeded progress, thereby tending to increase the burden on the ratepayers, and was of no advantage to the bricklayers, he would take steps to get this restriction withdrawn.

Mr. N. Chamberlain said that he had made inquiries into the matter referred to. He was informed that the method adopted was not the result of any prohibition of the use of trowels by the bricklayers' union, but that it had been found to be the method best adapted to the particular system of building in use.

Overtime.

Sir K. Wood informed Sir H. Brittain that no application had been received by the Ministry of Health from building trade operatives to work overtime. It was understood that the operatives in the direct employment of one Corporation had made such an offer. It was for the Town Council to decide whether they would accept it, and no consent on the part of the Department was required.

Light Castings.

Mr. R. Morrison asked the Minister of Health whether he had yet received the Report of the Committee on Building Prices with reference to the recent increase of prices by the National Light Castings Association.

Mr. N. Chamberlain said he regretted that, owing to the inability of the Chairman originally appointed to act in that capacity, the Report on this matter had been delayed. A new Chairman had now been appointed and he hoped that a Report would be available at an early date.

Contracts for the Empire.

Mr. N. Chamberlain informed Sir F. Hall that in a circular issued during his previous term of office at the Ministry of Health, local authorities were informed that where grants were given in aid of works, contracts for the work must be placed in this country, and they were urged in the absence of special circumstances to adopt the same principle in all works carried out by them. A further circular was about to be issued urging that preference should, wherever practicable, be given to goods produced within the Empire.

Loans to Building Societies.

Mr. Rye asked the Minister if it was the intention of the Government to advance money to approved building societies, at a low rate of interest and for a fixed period of years, to enable such societies to accelerate advances required for the erection of houses for the working classes.

Mr. N. Chamberlain replied: "No, sir. The Housing Acts already make provisions for assisting the erection of houses by the grant of subsidies and by providing facilities for the raising of capital, including arrangements for the guaranteeing by local authorities of part of the advances by building societies."

The Building Research Board.

Sir K. Wood informed Lady Astor that the representative of the Ministry of Health on the Building Research Board was Mr. Raymond Unwin. The work of the Building Research Board was being extended to include research into all aspects of the housing problem susceptible to scientific treatment such as the examination of new materials and methods of construction and the possibility of economising in the use of present materials. Additions to the staff of the Building Research Station were being made, and a building at Watford had been acquired and was being equipped at a capital cost of about £12,000. The additional maintenance charges involved would be of the order of £15,000 per annum.

The Nissen Houses.

Sir K. Wood informed Lady Astor that the experimental pair of Nissen houses at Yeovil had, subject to compliance with the conditions of the Housing Act, 1924, been recognised as eligible for the Exchequer grant of £9 per annum for forty years and a loan had been sanctioned for a period of sixty years. These houses had recently been inspected on behalf of the Ministry of Health, and the Minister proposed to consider the report on them before deciding what course to take as to encouraging their erection elsewhere.

NOTTINGHAM HOUSE BUILDERS' ASSOCIATION

THE annual dinner of the Nottingham and District House Builders' Association was held recently at Victoria Station Hotel. The president, Mr. G. Sadler, was in the chair.

Proposing the toast of the Association, Capt. H. M. Grant, president of the Birmingham and District House Builders' Association, said that Birmingham held the premier position in regard to the number of houses that had been erected in the past few years, and Nottingham came second. Private enterprise, he asserted, had not received the assistance it ought to have done from the Government and the authorities. If the subsidy and restrictions were done away with, and house building was left free and open, it would soon go a long way towards solving the housing question. They wanted to encourage every man to own his own house, and that could only be done by private enterprise through such an association as Nottingham possessed. The Government, he contended, should augment the brick trade so that there could be a proper supply. There was no house to touch the brick-built house. Why should not the Government form twenty battalions of the Royal Engineers, and take recruits from fifteen years of age, give them twelve months' training, and let them loose among house builders? This would solve the housing difficulty.

Responding to the toast, the President said there was no doubt that they were now building a much better class of house. He could remember when houses were put up on the principle of a house a day and a street a week. He was thinking of the Hyson Green district. One week they saw corn growing in the fields, and perhaps the next week they would find almost a street of houses built amongst the corn. Mr. Sadler recalled that at one time there were 7,000 houses empty in Nottingham. To-day property owners were in the fortunate position of having more applicants than houses. A lot had to be done to make up for the absence of building during the war.

Mr. A. W. Shelton, vice-president of the Nottingham Chamber of Commerce, and president of the Nottingham and District Property Owners' and Ratepayers' Association, submitted the toast of the National Federation of House Builders. These builders, he said, had specialised knowledge, and they were the people who would solve the housing problem if it were solved at all.

Mr. H. R. Selley, president of the National Federation of House Builders, in responding, said latest figures had been handed to him concerning the output of houses by private enterprise and municipalities, from the inception of the Housing Act in July, 1923. While municipalities had erected 86,000, through private enterprise there had been erected 133,400 odd houses. For many years there had been no real attempt to bring lads into the building trade in a properly organised manner. Bricklaying and plastering had been tabooed. Parents would rather see their boys go to town in a black coat, and suck the business end of a quill pen!

The toast of "The City and Commerce of Nottingham" was submitted by Mr. G. Anstey Perks, Long Eaton, and in response Alderman Sir B. Wright said they were never going to be satisfied with the position of affairs as it remained to-day in Nottingham. They were taking a good deal of courage in both hands to make up some of the leeway lost during the years of the war.

Mr. J. Squires toasted "The Guests," and Alderman Sir Albert Ball and Alderman H. Bowles responded.

SEASONING OF TIMBER*

The seasoning and preservation of timber are subjects of considerable importance as this material is universally used in buildings and furniture throughout the world, and the neglect of proper seasoning will result in defective material and loss, while the absence of efficient preservation leads to decay with a resultant waste of material and labour. The author of this volume deals exhaustively with all the aspects of timber treatment in a manner that will convince his readers of the necessity for giving serious attention to a subject which is frequently dealt with in a casual manner only. According to the Board of Trade returns for the five years immediately prior to the Great War, the average annual quantity of timber imported into this country, exclusive of furniture woods, was just under ten million tons, the value of which exceeded £25,000,000, and the proper care of the material which is represented by the outlay is a duty on the part of those responsible for its use.

It is interesting to note that creosote is the most popular preservative in this country, and the author considers this popularity is justified as it is effective and at the same time the cost is reasonable. A very useful chapter is devoted to the origin and cure of dry-rot, and we are glad to note that the measures to be taken for the eradication of this disease are specified very clearly and in sufficient detail to prove a real guidance to the reader. The half-hearted attempts that are sometimes made in dealing with the serious situation that arises when dry-rot is present are useless and lead to a waste of money and disappointment to the owner of the building, and this is frequently due to lack of knowledge and experience. We can recommend this book as being written by one who thoroughly understands his subject.

* "The Seasoning and Preservation of Timber." By Ernest G. Blake. (London: Chapman & Hall, 11 Henrietta-street, W.C.2.) Price 9s. 6d.

BUILDING STATISTICS

The following figures are taken from the Ministry of Labour Gazette for March.

Returns from local authorities in 140 of the principal urban areas in Great Britain (except the London County Council area), with a total population of 16,104,000, show that in February, 1925, plans were passed for buildings of an estimated cost of £5,336,100, as compared with £4,349,900 in January, 1925, and £5,023,400 in February, 1924. Of the total for February, 1925, dwelling-houses accounted for £3,374,700; factories and workshops for £499,200; shops, offices, warehouses and other business premises for £414,200; and other buildings, and additions and alterations to existing buildings, for £1,048,000.

The Ministry of Labour propose shortly to undertake an enquiry with a view to obtaining information as to the extent to which systems of apprenticeship at present prevail in each of the principal industries, the sources from which apprentices are obtained, the conditions of service of apprentices (commencing age, premium, length of apprenticeship, rates of pay, etc.), and the arrangements made for their training. No comprehensive information on this subject has been officially collected since before the war.

It is proposed, in the first place, to issue enquiry schedules to a large number of employers in industries in which apprentices are employed, asking for details as to the recruitment, training and conditions of service of their apprentices. The schedules are at present in preparation, and it is hoped that they will be ready for issue in the course of a few weeks. As in the case of the enquiry into earnings and hours of labour, the returns supplied by individual employers will be regarded by the Department as strictly confidential, and used only in the compilation of general information and statistics, in which no details relating to particular firms will be disclosed. The Department hopes that the employers to whom questionnaires are sent will assist in making the enquiry a success by supplying the details asked for in the schedules.

Employment in the building trades continued good with skilled operatives (other than painters) in most districts, but generally slack with unskilled workers. It continued very good with bricklayers and with plasterers in most districts; good with carpenters and joiners; and fairly good with masons and slaters. With plumbers employment showed a further slight decline and was only moderate; with painters there was a seasonal improvement, but employment was still bad in many districts; with builders' labourers it remained slack on the whole. In the brick trade employment continued good on the whole.

Building in the U.S.A.

The following table is a detailed forecast of building expenditure for 1925 in the United States, as given in the *Architectural Forum*.

Types of Building.	*Cost.* £	*Percentage of Public Demand.*
Automotive	32,053,050	2.9
Banks	38,277,225	3.3
Apartments	130,355,325	10.2
Apartment hotels	45,754,875	4.0
Clubs, fraternal, &c.	72,403,200	6.0
Community and memorial	13,732,200	1.2
Churches	84,032,100	8.0
Dwellings—		
Under £4,500	53,037,450	4.5
£4,500 to £11,250	22,936,500	2.2
Over £11,250	12,494,250	1.1
Hotels	88,380,925	9.2
Hospitals	51,533,550	4.5
Industrial	88,282,575	6.9
Office buildings	109,939,275	9.6
Public buildings	42,097,725	4.0
Schools	163,543,050	15.1
Stores	30,878,550	2.9
Theatres	30,595,725	3.2
Welfare, Y.M.C.A.'s &c.	12,744,000	1.2
	£1,123,271,550	100.0

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Bricklayers.	C'p'ters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bedford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Brentwood	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
E. Glam.(Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Great Yarmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lancaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/2
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/3½
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/4
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/4
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London { 12 m. radius	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/8½	1/4½
London { 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newport. Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/6	1/1
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

MARCH 30.—**Enfieldside.**—HOUSES.—Type A two-storied houses as follows: 20 houses at The Slonks, Shotley Bridge, and 30 at Highgate, Blackhill, for the U.D.C. J. McKay, Clerk. Deposit £1 1s.

MARCH 30.—**Falmouth.**—HALL.—Parish hall and institute at Church Corner. C. R. Corfield, A.R.I.B.A., architect, 23, Church-street.

MARCH 30.—**Gravesend (Kent).**—HOUSES.—For 26 houses at King's Farm estate for the Corporation. T. H. Dunch, 27, Clement's-lane, Lombard-street, London, E.C.4. Deposit £2 2s.

MARCH 30.—**Hindley.**—SEWERAGE BUILDING.—At Platt Bridge Low Level, for the U.D.C. O. P. Abbott, Surveyor. Deposit £5.

MARCH 30.—**Leyton.**—HOUSES.—For 44 houses on the Nursery Park estate, Lea Bridge-road, for the U.D.C. J. H. Jacques, Lic.R.I.B.A., 61, West Ham-lane, Stratford, E.15. Deposit £2.

MARCH 30.—**London.**—SCHOOL.—For Secondary School for boys, Sutherland-grove, Putney, for the L.C.C. Architect to the Council, The County Hall, S.E.1. Deposit £2 2s.

MARCH 30.—**London.**—DEMOLITION.—Breaking up and removal of concrete and brick foundations and debris now on the site, and for reinstatement of the ground generally, for the Lords Commissioners of H.M. Treasury, acting through the Surplus Stores, &c., Liquidation Department, Room 158, Caxton House West, Tothill-street, Westminster. Deposit £1 1s.

MARCH 30.—**Nevin.**—HOUSE.—At Nevin. E. F. White, Architect and Surveyor, St. Paul's Chambers, Colwyn Bay.

MARCH 30.—**Rhondda.**—MATERIALS.—Lime, fire bricks and retorts, silica bricks, for the U.D.C., and also the erection of a pumping station in Jones-street, Blaenclydach, together with concrete foundations for pumps, &c.

MARCH 30.—**Salford.**—GYMNASIA.—In Ordsall Park and Peel Park. L. C. Evans, Town Clerk.

MARCH 30.—**Stoke and Wolstanton.**—REPAIRS.—To Grindley Cottage, Newcastle-street, Penkhull, for the B.G. A. R. Piercy, Architect, Union Offices.

MARCH 30.—**Sunderland.**—HOUSES.—Eighty-six houses and 92 houses at the Red Machine Farm estate, for the C.B. Borough Engineer. Deposit £2 2s.

MARCH 30.—**Trowbridge.**—HOUSES.—Alternative tenders for the erection of 20 houses in two blocks of four and six pairs in concrete and brick, on the Charlotte-street site, for the Trowbridge Urban District Council. Mr. Geo. W. J. Clark, Surveyor and Engineer, Town Hall, Trowbridge.

MARCH 31.—**Aberdare.**—BUILDING.—For sub-station building, for the U.D.C. W. T. Hilder, Electricity and Tramways Department. Deposit £1 1s.

MARCH 31.—**Dublin.**—LABORATORY.—In the Municipal Buildings, Cork-hill, for the C.B. J. J. Murphy, Town Clerk.

MARCH 31.—**Erith.**—HOUSES.—For Erith U.D.C., 100 houses, including drainage, pavings, and fencing complete. Harold Hind, Engineer, C.O., Erith. Deposit £2.

MARCH 31.—**Huddersfield.**—HOUSES.—Joinering, slating, and painting at nine houses at the Brownhill Reservoir Works, Holmbridge. Brownhill Reservoir.

MARCH 31.—**Ide.**—ADDITION.—To Ide church institute. J. & H. Drew, Chartered Surveyors and Land Agents, 24, East Southernhay, Exeter.

MARCH 31.—**London.**—ALTERATIONS, &c.—At Grove Park Institution, Lee, S.E.12, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £5.

MARCH 31.—**London.**—LODGE.—Lodge, waiting rooms and conveniences, mess-room and timber store, &c., at the new cemetery, Mortlake, for the Hammersmith B.C. R. Hampton Clucas, Borough Engineer. Deposit £2 2s.

MARCH 31.—**London.**—SCIENCE MUSEUM.—Completion (second section) of the New Science Museum, South Kensington, S.W., for the Commissioners of H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s.

MARCH 31.—**London, E.2.**—ANNEXE.—Erecting annexe (ground floor only) to Bethnal Green Hospital, for the Guardians. C. Faulkner Jones, Clerk to the Guardians, Guardians' Administrative Offices, Bishop's-road, E.2. Deposit £1.

MARCH 31.—**Macduff.**—RESERVOIR.—Concrete reservoir on the Duff-street site, for the T.C. J. H. G. Peter.

MARCH 31.—**Maldon.**—HOUSES.—For six workmen's dwellings, at Steeple, for the R.D.C. Wm. Almond, surveyor, 6, Market-hill.

MARCH 31.—**Newlyn.**—STATION.—First Aid Station on the Newlyn Harbour road, for the Newlyn and District Nursing Association. H. Maddern, H.R.S. Mines, London, 11, Morrab-road, Penzance.

MARCH 31.—**Salisbury.**—HOUSES.—50 houses of the parlour and non-parlour type on the Stratford-road site, for the T.C. W. J. Goodwin, City Engineer and Surveyor. Deposit £2 2s.

MARCH 31.—**South Dublin.**—COTTAGES.—Fifty-two cottages and other works in the Terenure Electoral Division, for the R.D.C. G. Gallagher, Clerk of the Council, Office, 1, James'-street, Dublin. Deposit £1 1s.

MARCH 31.—**Warrington.**—REPAIRS.—To buildings, for the C.B. S. P. Silcock, Architect, 6, Egypt-street. Deposit £1 1s.

MARCH 31.—**West Hartlepool.**—ADDITIONS.—Bath-room accommodation at the Superintendent's Lodge, Ward-Jackson Park, and construction of back Chester-road and Everett-street, for the C.B. Town Clerk.

APRIL 1.—**Coronea.**—CHURCH.—At Coronea, near Killeshandra. W. H. Byrne & Son, Architects, 20, Suffolk-street, Dublin. Deposit £2 2s.

APRIL 1.—**Gwaun-Cae-Gurwen.**—HOUSES.—24 at Crescent-road site, for the Pontardawe R.D.C. E. D. Jones, Architect, Council Offices, Pontardawe. Deposit £3.

APRIL 1.—**London.**—DWELLINGS.—Block of dwellings on the Collingwood estate, Bethnal Green, for the L.C.C. Architect to the Council. Deposit £2.

APRIL 1.—**Normanton.**—HOUSES.—Twelve houses in Snydale-road, for the U.D.C. W. F. Copp, surveyor.

✱APRIL 1.—**Southend-on-Sea.**—PAVILION AND INCIDENTAL WORKS.—At Bonchurch Recreation Ground, Leigh-on-Sea, for the Corporation. Borough Engineer, Municipal Buildings. Deposit £2.

APRIL 1.—**Spalding.**—HOUSES.—For 19 pairs of houses on the Love-lane site, for the U.D.C. W. St. Leger Crowley, architect and surveyor, 32, Hall-place.

APRIL 1.—**Wallingford.**—HOUSES.—10 houses, East Hagbourne; 10 houses, Cholsey; 6 houses, North Moreton, for the R.D.C. J. G. T. West & Son, architects, The Knowl, Abingdon, Berks.

APRIL 1.—**Wembley, Middlesex.**—PUBLIC CONVENIENCES.—At Sudbury Recreation Ground, for the U.D.C. C. R. W. Chapman, Engineer and Surveyor. Deposit £2 2s.

APRIL 2.—**Devizes.**—COTTAGES.—For a pair at Allington, pair at Potterne, three pairs at Rowde, for the R.D.C. T. V. Trumper, Building Surveyor, 2, Pretoria-villas, Bath-road.

APRIL 2.—**Hawarden.**—HOUSES.—Forty-six class "A" houses and 48 class "B" houses at Saltney, near Chester, and also eight "A" houses at Abermorddu, for the R.D.C. F. Barrett, Surveyor's Office.

✱APRIL 2.—**Hove.**—CAST-IRON GLAZED SCREEN.—At No. 4 Western Lawns, for the Borough Council. The Surveyor, Town Hall. Deposit £1 1s.

APRIL 2.—**Lampeter.**—CONVENIENCES.—Three sanitary conveniences for the T.C. Surveyor.

APRIL 2.—**Lithuania.**—HOTEL.—Hotel at Kaunas (Koyno), the Capital of Lithuania. Mr. Dauksa, 44, Laisves Aleja, Kaunas.

✱APRIL 2.—**London, S.E.1.**—HEATING AND HOUSES.—(*a*) Extension and alteration and provision of central heating at Schools at Shirley; (*b*) erection of pair of houses at Hospital, Rotherhithe, for the Guardians of the Parish of Bermondsey. Clerk to the Guardians, 283, Tooley-street, S.E.1. Deposit, £5 Bank of England Note, between 10 a.m. and 12 noon, on March 25, 26 & 27, 1925.

APRIL 2.—**Midlothian.**—EXTENSION.—At Dalkeith High School, for the E.C. J. Kemp, Executive Officer, 9, Drumsheugh-gardens, Edinburgh.

APRIL 2.—**Sedgefield.**—HOUSES.—Fourteen at Cornforth-lane, Coxhoe, 24 at Station-road, Ferryhill, 24 at Windlestone Colliery, for the R.D.C. J. Stones, surveyor. Deposit £3 3s.

APRIL 2.—**Taunton.**—DECORATING.—Twenty-four houses at Lambrook-road, for the C.B. Ivor F. Shellard, Borough Engineer and Surveyor.

APRIL 3.—**Lydney.**—RESERVOIR.—Covered reinforced concrete reservoir, an extension of intake trenches, and additions to the pumping station at Ferneyley Wood, for the R.D.C. A. P. I. Cotterell & Son, Chartered Civil Engineers, 17, Old Queen-street, Westminster. Deposit £3 3s.

APRIL 3.—**Winchester.**—SCHOOL.—Alterations and additions at Clanfield Council School, for the Southampton C.C. A. L. Roberts, County Architect. Deposit £1 1s.

APRIL 3.—**Worsborough.**—BUILDING.—Walls, fences, paths, &c., and urinal, for the Miners' Welfare Committee. T. Shield, Surveyor, Saville House, Worsborough Bridge, near Barnsley. Deposit £1 1s.

APRIL 4.—**Ballyshannon.**—REPAIRS.—To cottages in Ballyshannon R.D. Scheme No. 53, in accordance with plan and specification prepared by the Engineer, Sailors' and Soldiers' Department, Colonial Office (Irish Branch), 30, Lower Fitzwilliam-street, Dublin. Deposit £1 1s.

APRIL 4.—**Clogheen.**—REPAIRS.—To cottages in Clogheen (co. Tipperary) R.D. Scheme No. 130, in accordance with plan and specification prepared by the Engineer, Sailors' and Soldiers' Department, Colonial Office (Irish Branch), 30, Lower Fitzwilliam-street, Dublin. Deposit £1 1s.

APRIL 4.—**Formby.**—HOUSES.—Thirty-six houses of the non-parlour type, for the U.D.C. E. H. Bond, Clerk of the Council. Deposit £2 2s.

APRIL 4.—**Glasgow.**—CONVENIENCES.—At Lorne-square, Govan, for the T.C. J. Lindsay, Town Clerk.

APRIL 4.—**Glasgow.**—REPAIRS.—To the buildings and steadings of the farms of Ledrishbeg, Mollanbowie, Over Balloch, and Ledrishmore, on Balloch estate, for the T.C. J. Lindsay, Town Clerk.

APRIL 4.—**Ramsey.**—HOUSES.—For 16 houses, opposite Gladstone-terrace, for the Town Commissioners. G. Kay & Sons, architects, 22, Athol-street, Douglas.

✱APRIL 4.—**Southampton.**—CLASSROOM AND NEW OFFICES.—Erection of an additional classroom and new offices at Lee-on-the-Solent Council School, for the County Council of Southampton. Mr. A. L. Roberts, County Architect, The Castle, Winchester. Deposit £1 1s., by cheque, payable to the Hants County Council and crossed "Lloyds Bank, Ltd., Capital and Counties Branch, Winchester."

✱APRIL 4.—**West Ham.**—Painting and repairing of schools, for C.B. J. N. Jacques, 61, West Ham-lane, Stratford, E.15. Deposit £1.

APRIL 4.—**Winchester.**—COUNCIL SCHOOL.—At Christchurch, near Bournemouth, for Southampton C.C. A. L. Roberts, County Architect. Deposit £2 2s.

APRIL 6.—**Barry.**—HOUSES.—For (*a*) 16 semi-detached parlour type houses, and (*b*) 34 semi-detached non-parlour type houses, between Trinity-street and College-road, for the U.D.C. E. R. Hinchsliff, architect, Council Offices. Deposit, £1 1s.

✱APRIL 6.—**Beddington and Wallington, Surrey.**—HOUSES.—External painting work on 68 houses, for the U.D.C. Engineer and Surveyor, Council Offices, Wallington.

APRIL 6.—**Chelmsford.**—ROOFING.—For re-roofing 26 houses in Woodland-road, Boarded Barns estate, for the C.B. Borough Engineer.

APRIL 6.—**Dublin.**—WIRING.—Electric wiring of 180 houses at Marino, for the C.B. J. J. Murphy, Town Clerk. Deposit £1 1s.

APRIL 6.—**Frinton-on-Sea.**—CONVENIENCE.—On the sea front at Frinton, for the U.D.C. Surveyor.

✱APRIL 6.—**Gloucester.**—HOUSES.—100, for the Corporation of the City of Gloucester. City Surveyor, Guildhall, Gloucester. Deposit £5 5s.

APRIL 6.—**Ilford.**—COTTAGES.—12 cottages at the rear of the Electricity Works, Ley-street, for the U.D.C. H. Shaw, engineer and surveyor. Deposit, £2 2s.

APRIL 6.—**Kidderminster.**—RESERVOIR.—Reinforced concrete reservoir at Axborough Hill, engine and pump house, &c., at Cookley Bridge, and the laying and jointing of about seven miles of 4 in. and 3 in. cast iron water pipes and provision of fittings, for the R.D.C. Fiddian & Deeley, engineers, 13, Church-street, Stourbridge. Deposit £3 3s.

APRIL 6.—**Par (Cornwall).**—COTTAGE.—At Par, for the Territorial Army Association. A. J. Cornelius, F.R.I.B.A., Architect, Truro.

APRIL 6.—**Ripon.**—HOUSES.—For 12 houses, for the T.C. J. H. Gough, Town Clerk, Town Hall. Deposit £5.

APRIL 6.—**Walsall.**—HOUSES.—For 40 parlour type houses on the Pelsall-lane site at Rushall, also for 8 bungalows on the Walsall Wood-road site at Aldridge, for the R.D.C. T. H. Partridge, Clerk to the Council, Darwall-street. Deposit £2 2s.

✱APRIL 7.—**Ashford, Kent.**—Alterations and additions to the Working Men's Club. Edwin A. Jackson, Architect, Ashford, Kent.

✱APRIL 7.—**Dunstable.**—COTTAGES.—Erection of 18 cottages at the Watling-street site for the Corporation of the Borough of Dunstable. Mr. W. F. Wilkins, Borough Surveyor and Architect, Town Hall, Dunstable. Deposit £1 1s.

✱APRIL 7.—**Hornsey.**—FENCING.—Wood and iron for Hornsey U.D.C. The Engineer and Surveyor, Town Hall, Highgate, N.

APRIL 7.—**Loughborough.**—FENCING.—192 lineal yds. of fencing, for the C.B. W. Granger, Borough Surveyor.

✱APRIL 7.—**Maidstone.**—OFFICES.—Erection of offices at St. Peter-street, Maidstone, for the Maidstone Gas Company. Mr. F. Livesey, M.Inst.C.E., Gas Works, Maidstone. Deposit £2 2s.

✱APRIL 8.—**Birkdale (Southport, Lancs.).**—TELEPHONE EXCHANGE.—Erection of, for the Commissioners H.M. Office of Works (Contracts Branch), King Charles-street, S.W.1. Deposit £1 1s.

APRIL 8.—**London.**—ENGINE HOUSE.—At Hanworth-road, Kempton Park, for the M.W.B. H. E. Stilgoe, Chief Engineer, Clerkenwell, E.C.1. Deposit £10.

APRIL 8.—**Southport.**—EXCHANGE.—Telephone Exchange at Birkdale, for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

APRIL 9.—**Rainford.**—HOUSES.—Ten houses fronting Ormskirk-road, opposite the Bridge Inn, for the U.D.C. Surveyor. Deposit £1 1s.

✱APRIL 9.—**Wallington (Surrey).**—TELEPHONE EXCHANGE.—Erection of, for the Commissioners H.M. Office of Works (Contracts Branch), King Charles-street, S.W.1. Deposit, £1 1s.

APRIL 10.—**Settle.**—HOUSES.—For trades in connection with the erection of 12 houses at Hellifield, for the R.D.C. T. A. Foxcroft, Surveyor to the Council.

APRIL 13.—**Derbyshire.**—ALTERATIONS.—For alterations and additions at the Beighton Council Schoolhouse. G. H. Widdows, Architect to the Committee, County Offices, St. Mary's-gate, Derby. Deposit £1 1s.

✱APRIL 13.—**Dublin.**—HOUSES.—Erection of 216, in two sections of 108, for the Borough Commissioners. City Treasurer, Dublin. Deposit £2.

APRIL 13.—**Grantham.**—PUBLIC LIBRARY AND MUSEUM.—Erection of a new Public Library and Museum for the Borough Council of Grantham. Mr. Gilbert A. Ballard, Borough Surveyor, Guildhall, Grantham. Deposit £5 5s.

APRIL 14.—**Castleford.**—EXTENSIONS.—For a new boys' department at Temple-street Council School, for the West Riding E.C. Education Department, County Hall, Wakefield.

✱APRIL 15.—**Brighton.**—Telephone Exchange at Preston, for H.M.O.W. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s.

APRIL 15.—**Hatfield.**—HOUSES.—Twelve houses at Little Heath, for the R.D.C. Crickmer & Foxley, architects, 1, Lincoln's Inn Fields. Deposit £2 2s.

APRIL 15.—**Hatfield.**—HOUSES.—Eight houses at Northaw, for the R.D.C. Crickmer & Foxley, architects, 1, Lincoln's Inn Fields, W.C.2. Deposit £2 2s.

APRIL 15.—**Trowbridge.**—BUILDING.—New police station and married quarters, for the Wilts C.C. T. Walker, F.R.I.B.A., County Architect, County Architect's Department, Trowbridge. Deposit £2 2s.

✱APRIL 16.—**Oldham.**—Post Office and Telephone Exchange at Shaw, for H.M.O.W. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s.

APRIL 17.—**Birmingham.**—CENTRES.—Special subjects centres at Nansen-road schools, Saltley, for the E.C. W. H. Ashford, Architect, 32, Paradise-street.

✱APRIL 17.—**London, S.E.22.**—Cleaning, painting and repairs at the Dulwich Liberal and Radical Club. Secretary, 108 and 110, Lordship-lane, S.E.22.

✱APRIL 17.—**Surrey.**—COTTAGES.—Eight at Brookwood and six at Netherne, for the County of Surrey Asylums Committee. F. J. Hodgson, 36, High-street, Guildford. Deposit £1 1s.

APRIL 18.—**Sunderland.**—HOUSES.—178 houses, for B.C. Borough Engineer, Town Hall, Sunderland. Deposit £2 2s.

✱APRIL 20.—**Chislehurst.**—COTTAGES.—50, for the D.C. Crickmer & Foxley, architects, 1, Lincoln's Inn Fields, London, W.C. Deposit £2 2s.

APRIL 27.—**Durham.**—ADDITION TO SCHOOL.—New department to accommodate 304 scholars, together with the work in connection with alterations and improvements to the existing premises, for the County Council. Mr. F. Willey, F.R.I.B.A., 34, Old Elvet, Durham.

APRIL 27.—**Silksworth.**—EXTENSIONS.—New Department to accommodate 304 scholars, and alterations and improvements to the existing premises, for the Durham C.C. F. Willey, F.R.I.B.A., 34, Old Elvet, Durham.

✱MAY 11.—**London, E.1.**—TENEMENT.—Erection of tenement buildings in Carr-street, Limehouse, E.14, for Borough Council of Stepney. Borough Engineer, Municipal Offices, Rayne-street, Old Gravel-lane, E.1. Deposit £2, Treasury Notes.

NO DATE.—**Barnsley.**—SCHOOL.—Elementary school in Greenfoot-lane, Wilthorpe, for the E.C. Dyson, Cawthorne & Coles, architects, 10, Regent-street.

NO DATE.—**Dumbarton.**—BUILDING.—For various trades in connection with the erection of 61 blocks, comprising 248 houses, at Auchentoshan, Duntocher, for the Eastern D.C. J. Weekes, architect, 88, College-street.

NO DATE.—**Dumbarton.**—HOUSES.—12 blocks, comprising 50 houses, at Plotholders' Ground, Renton, for the Western D.C. J. Weekes, architect, 88, College-street.

NO DATE.—**Helensburgh.**—HOUSES.—24 houses, for the T.C. Burgh Surveyor.

NO DATE.—**Salop.**—HOUSES.—House at Stretton and one at Sweeney, near Oswestry, for the C.C. The County Land Agent, Shirehall, Shrewsbury.

NO DATE.—**Seaham Harbour.**—SCHOOLS.—Catholic schools at Seaham Harbour and Birtley. Stienlet & Maxwell, architects, 14, Saville-row, Newcastle. Deposit £2 2s.

NO DATE.—**Wakefield.**—PAINTING.—To the Court houses, police stations, lock-ups, &c., throughout the county, for the West Riding C.C. Percy O. Platts, County Architect.

MATERIALS, etc.

MARCH 30.—**Bridgend.**—MATERIALS.—Galvanised water piping, &c., for the Mid-Glamorgan Water Board. E. W. Davies, Superintendent and Manager.

MARCH 30.—**Great Yarmouth.**—MATERIALS.—Granite: 400 tons 1½ in. gauge, 800 tons 2 in. gauge, 2,500 tons ¾ in. to ¼ in. chippings. S. P. Thompson, Borough Engineer, Town Hall.

MARCH 30.—**Hartismere.**—MATERIAL.—For 2,000 tons of 1½ in. granite and about 2,000 tons of pit stones, for the R.D.C. H. Warnes, Solicitor, Clerk to the Council, Council Offices, New Infirmary, Victoria-road Eye, Suffolk.

MARCH 30.—**South Africa.**—STEEL.—Structural steel, for the South African Railways. The Department of Overseas Trade, 35, Old Queen-street, London, S.W.1. (Reference No. A.X. 1748.)

MARCH 30.—**Wilmslow.**—MATERIALS.—Granite chippings, concrete flags, kerbs and setts, for the U.D.C. A. S. Cartwright, Surveyor.

MARCH 30.—**Woodbridge.**—GRANITE.—500 tons of broken granite, 2 in. gauge, for the U.D.C. W. G. Whisstock, surveyor.

MARCH 31.—**Bideford.**—GRANITE.—For 250 tons of ¾ in. granite chippings, 500 tons of ¾ in. to ¼ in. granite tops, for the T.C.

MARCH 31.—**Cardiff.**—STONE.—Mountain limestone, for the R.D.C. M. Warren, Clerk, 20, Park-place.

MARCH 31.—**Dover.**—MATERIALS.—Building materials, for the Harbour Board. R. Mowll, Registrar of Dover Harbour Board, Castle-street.

MARCH 31.—**Formby.**—MATERIALS.—Limestone pitching, Portland cement, common bricks, stoneware pipes, and fencing timber, for the U.D.C. E. H. Bond, Clerk.

MARCH 31.—**Hazel Grove and Bramhall.**—MATERIALS.—Stone chippings and other materials, for the U.D.C. F. Pigeon, Clerk, Council Offices.

MARCH 31.—**Hoylake and West Kirby.**—MATERIALS.—Chippings, Portland cement, stoneware sewer pipes, and cement concrete flags, for the U.D.C. Engineer and Surveyor.

MARCH 31.—**Hunslet.**—MATERIALS.—Highway material, for the R.D.C. W. B. Pindar, Clerk.

MARCH 31.—**Southampton.**—KERBS.—Kerb and setts, for the C.C. W. J. Taylor, County Surveyor.

MARCH 31.—**Southwell.**—MATERIAL.—Road material, for the R.D.C. R. Morris, Highway Surveyor, Easthorpe.

MARCH 31.—**Thakeham.**—MATERIALS.—Basalt, granite, flints, for the R.D.C. W. Forrester, surveyor, Storrington, Pulborough, Sussex.

APRIL 2.—**Glasgow.**—MATERIALS.—Lime and cement, fireclay goods, and paints, for the T.C. J. Lindsay, Town Clerk.

APRIL 2.—**Hove.**—SCREEN.—Cast-iron glazed screen at No. 4 Western Lawns, for the C.B. Borough Surveyor. Deposit £1 1s.

APRIL 4.—**Bradfield.**—MATERIALS.—Granite and limestone macadam, limestone block, granite and limestone chippings, for the R.D.C. C. Ford, Highways Surveyor, Station-road, Theale, Berks.

APRIL 4.—**Crompton.**—MATERIALS.—Bricks, flags, kerb and edgings, granite and limestone macadam, grit setts and grit chippings, for the U.D.C. F. F. Gartside, Clerk to the Council.

APRIL 4.—**Dorking.**—MATERIALS.—Slag and granite or basalt chippings, for the U.D.C. S. S. Gettings, Surveyor.

APRIL 4.—**Oakham.**—MATERIALS.—3,000 tons broken granite, 3,000 tons broken furnace slag, 1,000 tons screened gravel, for the R.D.C. F. W. Nichols, Surveyor.

APRIL 6.—**Dundee.**—PIPES.—2,000 4 in. internal diameter cast-iron pipes, for the Water Commissioners. G. Baxter, Engineer and Manager.

APRIL 6.—**Prescot.**—MATERIALS.—Portland cement, stoneware pipes, gullies, &c., granite setts, broken granite and slag, limestone, York setts, kerbs, channels and flags, clean gravel chippings, and sand, artificial stone kerbs and flags, hardcore and concrete stone, for the U.D.C. F. A. Gregson, Engineer and Surveyor, 2, West-street.

APRIL 9.—**Chelmsford.**—GRANITE.—Broken Guernsey granite, for the C.B. E. J. Miles, Borough Engineer and Surveyor.

APRIL 17.—**London.**—STEELWORK.—Steelwork for bridges, for the South Indian Railway Co. A. Muirhead, Managing Director, 91, Petty France, S.W.1.

APRIL 18.—**Nelson.**—MATERIALS.—Broken granite and limestone, flags, setts, kerbs, tarred and dried slag, cement, and lime, &c., for the C.B. W. Shackleton, Borough Engineer and Surveyor.

MAY 15.—**Siam.**—STEEL.—Superstructure of steel railway bridges, for the Royal State Railways. Commissioner-General, Bangkok.

MAY 20.—**Madras.**—PIPES.—Stoneware pipes and specials, varying from 4 in. to 15 in. in diameter, and aggregating a total length of about 300,000 ft., for the T.C. J. Mansergh & Sons, Agents to the Corporation of Madras, India, 5, Victoria-street, Westminster, London, S.W.1.

JUNE 3.—**South Africa.**—PIPES.—Approximately 33 miles 33 in. diameter steel pipes and specials, cement lined, for the Cape Town T.C. J. R. Finch, Town Clerk, City Hall. Deposit £5 5s.

ENGINEERING, IRON AND STEEL.

APRIL 6.—**Newcastle-upon-Tyne.**—JETTY.—Timber jetty and steel sheet piling at the Engineering Yard, Howdon-on-Tyne, for the Tyne Improvement Commission. Secretary. Deposit £2 2s.

APRIL 10.—**Bratton Clovelly.**—BRIDGE.—Concrete and steel bridge over the River at Reed Water, for the Okehampton R.D.C. G. A. Friend, surveyor, Northblew.

ROAD, SEWERAGE, AND WATER WORKS.

MARCH 30.—**Aberystwyth.**—MAINS.—Provision and laying and jointing of water mains, together with the construction of lime treatment plant and house, for the C.B. Borough Surveyor's Office. Deposit £3 3s.

MARCH 30.—**Filey.**—ROADS.—Two reinforced concrete roads, for the U.D.C. B. H. Noble, Surveyor, Council Offices. Deposit £1.

MARCH 30.—**Leamington.**—ROADS.—Levelling, paving, and making good certain streets, for the Corporation. J. J. Kennan, Town Hall. Deposit £2 2s.

MARCH 31.—**Bentley-with-Arksey.**—SEWER.—Construction of a 9 in. soil sewer 600 yds. in length, in Hall Ville-lane, Toll Bar, for the U.D.C. P. C. Woodhall, engineer. Deposit, £1.

MARCH 31.—**Buckinghamshire.**—RECONSTRUCTION.—Dashwood's Hill by-pass, for the C.C. E. Winfield, County Surveyor, Lloyds Bank Chambers, Aylesbury. Deposit £10.

APRIL 1.—**Wembley.**—SEWER.—Laying 480 yds. of 6 in. dia. glazed stoneware pipe sewer, together with the necessary manholes, for the U.D.C. C. R. W. Chapman, engineer and surveyor. Deposit, £2 2s.

APRIL 2.—**Ashby Woulds.**—SEWER.—For 500 yards of 6 in. stoneware pipe sewer, together with manholes, and outfall works, for the U.D.C. Pick, Everard, Keay & Gimson, engineers, 6, Millstone-lane, Leicester. Deposit £1 1s.

APRIL 2.—**Finchley.**—STREETS.—For making-up of Hervey-close, Lansdowne-road, The Mews, N.12, Clifford-road, Chandos-road, Elm-gardens, Rosemary-avenue, Orchard-avenue, for the U.D.C. P. T. Harrison, engineer, 9, The Hawthorns, Regent's Park-road, N.3. Deposit £3.

APRIL 2.—**Finchley.**—ROADS.—For providing and laying creosoted deal blocks, including reinforced concrete foundation, in the main roads, for the U.D.C. P. T. Harrison, engineer, 9, The Hawthorns, Regent's Park-road, N.3. Deposit £1.

APRIL 3.—**East Suffolk.**—WIDENING.—For widening sections nos. 5, 6 and 7, of the Ipswich-Martlesham road, for the C.C. W. Jervis, County Surveyor, County Hall, Ipswich. Deposit £5.

APRIL 3.—**Magor.**—ROAD.—Improvement and diversion of district road leading from the County-road between Newport and Chepstow to a point near Ford Farm, Magor, for the R.D.C. Thomas & Morgan & Partners, civil engineers, Pontypridd. Deposit £5 5s.

APRIL 3.—**St. Mellon's.**—STREETS.—Construction and making up of the streets known as Woodville-road and Edward VII-avenue, for the R.D.C. Thomas & Morgan & Partners, civil engineers, Pontypridd. Deposit £5 5s.

APRIL 4.—**Brierley Hill.**—PAVING.—Laying 6,200 sup. yds. sett paving, together with reinforced concrete foundations, kerbing, &c., for the U.D.C. J. Yorke, Surveyor. Deposit £5 5s.

APRIL 6.—**Finchley.**—ROAD.—For construction of a section of the North Circular road, approximately 1.63 miles, commencing at Regent's Park-road and terminating at the Great North-road. A. Dryland, County Engineer and Surveyor, Guildhall, Westminster, S.W.1.

APRIL 6.—**South Westmorland.**—SEWERS.—Construction of stoneware and concrete sewers, manholes, &c., together with tidal storage tanks at Arnside, for the R.D.C. H. B. Ward, Chartered Civil Engineer. Commerce Chambers, 15, Lord-street, Liverpool, Deposit £5 5s.

APRIL 7.—**Dunfermline.**—ROADS.—For (*a*) reinforced concrete foundation to Limekilns-road and Grieve-street; (*b*) reinforced concrete surface to Limekilns-road; (*c*) two coats granited mastic asphalt to Admiralty-road East and Queensferry-road, for the T.C. R. Muir Morton, Burgh Engineer.

APRIL 8.—**Wharfedale.**—SEWERS.—Construction of about 770 lineal yds. of pipe sewers, 12 in. and 9 in. diameter, together with manholes, for the R.D.C. E. J. Silcock, engineer, 10, Park-row, Leeds. Deposit £5.

APRIL 14.—**London.**—SEWER.—On the White Hart-lane estate, Tottenham, for the L.C.C. Chief Engineer and Administrator of Housing Development Schemes, 3, Warwick House-street, Cockspur-street, Charing Cross, S.W.1. Deposit £2.

APRIL 18.—**Hatfield.**—SEWERS.—Laying about 840 yds. of 6 in. stoneware sewer, with manholes, in St. Albans-road, for the R.D.C. G. Bertram Kershaw, Chartered Civil Engineer, 9, Victoria-street, Westminster, S.W. Deposit £2 2s.

APRIL 20.—**Baildon.**—MAINS.—Excavation, laying and jointing of 2,620 lineal yds. of 7 in. and 6 in. steel and cast-iron water main, together with the supplying of the necessary valves and special materials, for the High Level Main from Birch Close-lane, Bingley, to Northgate, for the U.D.C. R. Howard Moore, Clerk.

Competitions.

(*See Competition News, page* 478.)

Auction Sales, Tenders, etc.

✱MARCH 31.—**London, S.W.**—Veryard & Yates, at 255, Clapham-road, timber, fittings and building materials. Auctioneers, 365, Norwood-road, S.E.27.

✱MARCH 31.—**Oxted (Surrey).**—Charles E. Clark at Master Park, timbers and builder's effects. Auctioneer, Beddington House, Beddington, near Croydon.

APRIL 1.—**London, S.W.1.**—Henry Butcher & Co., by order of the Receiver, *re* A. Waller & Co., Ltd., at 15A, Kinnerton-street, Belgravia, S.W.1, plant and stock of a builder and decorator. Auctioneers, 63 & 64, Chancery-lane, W.C.

APRIL 2.—**London, N.W.**—Messrs. Knight, Frank & Rutley will sell, by direction of W. J. Wood, Esq., O.B.E., in the Hanover-square Estate Room, long leasehold residential property, Brondesbury House, 221, Willesden-lane, N.W., grounds of about 3¼ acres. Auctioneers, 20, Hanover-square, London, W.1.

✱APRIL 4.—**Great Bookham, Surrey.**—C. E. Clark, Eastwick-buildings, Lower-road, timbers, bricks, principals and builders' effects. Auctioneers, Beddington House, near Croydon.

✱APRIL 6.—**Horley, Surrey.**—C. E. Clark, Market Field, prime new timbers and builders' effects. Auctioneers, Beddington House, near Croydon.

APRIL 7.—**London, E.C.4.**—Messrs. Fairweather & Turner will sell, by order of the Unit Construction Co., Ltd., at the Mart, 155, Queen Victoria-street, E.C.4, at a low reserve, The North Essex Portland Cement Works, Saffron Walden, Essex, close to railway station (N.E.R.). Auctioneers, 5, Lower Grosvenor-place, Victoria, S.W.1.

✱APRIL 21.—**Kensington, W.**—Messrs. Drivers, Jonas & Co. will sell, at the London Auction Mart, freehold ground rents, freehold property at Kensington. Auctioneers, 7, Charles-street, St. James'-square, S.W.1.

✱APRIL 28 AND FOLLOWING DAYS.—J. T. Skelding & Co., *re* P. & W. Anderson, Ltd. (in liquidation). By order of Receiver for the Debenture Holders, at Yeoman-street, plant yard off Plough-road, Deptford, S.E. Contractor's plant and machinery. Auctioneers, 48, Gresham-street, Guildhall, E.C.2.

✱MAY 2.—**Hertford.**—Brand & Oram, Hertford, and Ralph Pay & Taylor, 3, Mount-street, London, W.1, auctioneers, at the Dimsdale Arms Hotel, Hertford, freehold building land.

Public Appointments.

MARCH 30.—**Dover.**—Two or three instructors in Woodwork and Metalwork respectively. Applicants should have good workshop experience, with ability to teach, and a knowledge of and sympathy with adolescent boys at "Works Training" Centre, Dover. Mr. F. Whitehouse, M.A. (Honorary Adviser and Secretary, "Works Training" Centre), County School for Boys, Frith-road, Dover.

MARCH 31.—**Stoke-on-Trent.**—General Architectural Assistant required by the County Borough of Stoke-on-Trent. Mr. A. Burton, M.Inst.C.E., F.S.I. Borough Surveyor, Town Hall, Stoke-on-Trent.

MARCH 31.—**Swansea.**—TWO TECHNICAL ASSISTANTS.—Required by the Swansea B.C. Borough Engineer and Surveyor, Guildhall, Swansea.

✱APRIL 4.—**Staffordshire.**—DRAUGHTSMAN.—In the Architect's Department, required by the Staffordshire E.C. Architect, County Education Offices, Stafford.

✱APRIL 6.—**Breconshire.**—COUNTY SURVEYOR AND ARCHITECT.—Required by the County Council. Henry F. W. Harries, Clerk, Brecon.

✱APRIL 6.—**Ilkeston.**—TEMPORARY ARCHITECTURAL ASSISTANT.—Required by the Corporation. The Clerk, Town Hall, Ilkeston.

✱APRIL 7.—**Singapore.**—Assistant Architect. Peirce & Williams, 180, Hope-street, Glasgow.

✱APRIL 9.—**Gillingham, Kent.**—Temporary Town-Planning Assistant required by the Borough Council. Borough Engineer and Surveyor, Council Offices, Gillingham, Kent.

✱NO DATE.—**Westminster, S.W.1.**—Temporary Architectural Assistant required by the Middlesex County Council. County Architect, Guildhall, Westminster, S.W.1.

PROPOSED NEW BUILDINGS & OTHER WORKS.*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

Accrington.—The board of management of the Victoria Hospital are considering a scheme of extensions to the Institution, estimated to cost £40,000, and the provision of a nurses' home, to cost £10,000 to £12,000. The preparation of plans are in the hands of the B.S. A sub-committee has been formed to decide on measures to be adopted.

Annfield.—The U.D.C. decided to submit to the M.H. on recommendation of the Housing Committee, a provisional programme for the erection of 33 houses at West Kyo and 70 houses at Dipton.

Audenshaw.—The Lancashire Higher E.C. recommend sanction for the erection of a boys' secondary school for the districts of Audenshaw, Denton, and Droylsden. The building so planned as to be capable of extension for the accommodation of girls. Negotiations for a site in Stamford-road is proceeding.

Barry.—This place is to be improved with an open-air baths and a marine lake, and the construction of a sea wall across Whitmore Bay.

Beccles.—The Working Men's Co-operative Society has obtained permission of the Corporation to build a covered way over Rooks-lane, at a cost of about £3,000. Mr. A. Pells has prepared the necessary plans.

Bedwas & Machen.—The U.D.C. is to erect 40 houses and the scheme has received Ministry sanction.

Bentley.—The U.D.C. has decided to proceed with a new housing scheme on a site off Conyers-road. The C.C. authorities are being urged to erect a new police station in the village.

Beverley.—The East Riding C.C. propose to construct a new sugar beet factory.

Bexhill.—The T.C. passed plans: W. J. Burstow, 12 houses, for Messrs. Abbey.

Biggleswade.—The Corporation of Bedford and Luton propose the acquisition of Holme Court for a joint small-pox hospital.

Birchington.—Church and school buildings for the local Baptist Congregation. Plans have been prepared by Mr. Hugh W. Millar.

Birkenhead.—Mr. H. G. Jones, builder, of King's-parade Estate, Rock Ferry, has secured the Plymyard Manor Estate, for a big scheme, for the erection of about 3,000 houses. The building scheme and the planning of the lay-out has been prepared by Messrs. Medcalfe & Medcalfe, architects, 7, Moorfields, Liverpool. The estimated cost is over 3½ million pounds.

Blackburn.—A R.C. Church of All Souls' is to be erected on a site adjoining the cemetery. The building will cost, when furnished, £2,000.

Blaydon.—The U.D.C. has decided to construct a storm-water sewer down James-street, at an estimated cost of £8,000. Sanction has been secured from the M.H. for the erection, by the Council, of 182 houses at Bleach Green, near Winlaton.—The Council is now seeking permission to build another 150 houses at Chopwell.

Bloomsbury.—The committee of the Barclay Workshop for Blind Women are raising a building fund for the extension of premises in Crawford-street.

Bodmin.—The T.C. decided to build 30 workmen's houses on the Lostwithiel-road.

Bradford.—The Corporation Bill proposes the considerable enlargement of the Scarr House reservoir.

Brentford.—A factory is to be erected for Hudson Essex Motors, Ltd., on a site between Gunnersbury-lane and Great West-road.

Chesterfield.—The Royal Infirmary Hospital Board has decided to embark upon a new extension scheme.

Chester-le-Street.—The R.D.C. is to erect 20 bungalows on each of the following sites: Lumley, Edmondsley and Fatfield, and has decided to make application to the M.H. for sanction to borrow £30,780 to carry out the scheme.

Colchester.—An effort is being made to raise £700 to equip a new wing at the Hospital.

Crompton.—Plans have been approved for a new power house and bridge for the Newley Mill, a new pavilion for the Shaw Wesleyan C. & T. Club, at Hole Bottom; drainage scheme, in Rochdale-road, for the site of a new post office; the D.C. are to undertake the repairing of Linney-lane Bridge.

Crowborough.—The proposal is on foot for the erection of a public hall and the introduction of a good-class secondary school for the town and district.

Epsom.—A £7,000 hall is to be built by Brotherhood.

Erith.—Extensions are to be made to the Technical Institute for the governing committee. The new building has been designed to conform with the existing one, and will provide new class-rooms, laboratories, &c. The architect is Mr. W. H. Robinson. The cost is estimated at £4,500.

Essex.—The County E.C. propose the preparation of plans for erecting a secondary school for girls, alterations to existing buildings, and the provision of hostel and headmaster's house at Grays Palmer's Endowed School.

Failsworth.—The congregation of the New Jerusalem Church are making an effort to raise £3,000, the estimated cost of proposed alterations and additions to the present school premises by the building of extra class-rooms, primary department, kitchen and lavatory accommodation, and extension to the ante-rooms.

Falkirk.—The Dean of Guild Court has granted warrants as follows: Two blocks of flatted dwelling houses to Messrs. Wilson & Tout, at The Nurseries, Kerse-lane, estimated cost £4,500.

High Wycombe.—Three new observation wards are to be built at the Hospital. The plans have been prepared by Mr. T. Thurlow.

Houghton-le-Spring.—The U.D.C. has resolved to purchase a site at rear of Houghton rectory for housing purposes.

Hythe.—The T.C. has elected a committee to report on a scheme for the erection of a winter garden on the sea front.

Keighley.—Plans passed by T.C.: Ten houses in Goulbourne-street, for Mr. F. Simpson.

Leigh.—The Infirmary Governors have decided to start upon the extensions of the infirmary, which will involve a sum of about £26,000. The extensions include the erection of a nurses' home and a new children's ward, and the acquisition of more land.

Letchworth.—The Animals' and Anti-Vivisection Society are proposing to build a public abattoir and slaughterhouse in Green-lane, Letchworth. Negotiations as to the scheme are in progress. The architect is Mr. R. Stephen Ayling, F.R.I.B.A.

Lewes.—The Sussex County Agricultural Society has obtained a definite promise of a sugar-beet factory, to be started in Sussex.

Llanelly.—The T.C. has received Ministry sanction to its scheme for central schools.

London (Battersea).—The B.C. have approved the estimate of the Borough Surveyor for repaving the carriageway of Falcon-road, between Mossbury-road and Battersea Park-road, at an estimated cost of £9,319 4s. 2d.—Repairs are to be carried out at Latchmere-road and Nine Elms baths, at an estimated cost of £269 17s.

London (Gol ers Green).—A £4,000 church hall is being built by the Presbyterians.

London (Hackney).—The B.C. are to borrow £34,500 for the erection of maisonettes in Fletching-road.—Application is to be made to the Electricity Commissioners for sanction to the borrowing of the sums of £2,500 and £3,000 for sites for sub-stations.—Plans passed: E. L. Haynes, factory premises, 203 to 213, Mare-street; Durbin & Katesmark, post-mortem room at the German Hospital, Dalston-lane; G. H. Burghes, 10 houses on the south-eastern side of Cravenwalk between Ashtead-road and Clapton Common; F. W. Woolworth & Co., Ltd., structural alterations and to build a stockroom at 333 to 337, Mare-street.

London (Islington).—The B.C. are proposing to carry out various road works.

London (Westminster).—Plans passed by the City Council: Sir Aston Webb & Son, additional walling to the Army & Navy Stores, Victoria-street, Francis-street and Howick-place; Baillie, Scott & Beresford, addition and jalousies to 30, Montpelier-place; Constantine & Vernon, building at Eccleston-place.—The Council are going to carry out various road improvement schemes, estimated at £93,187 4s.

Loughton.—Essex E.C. propose the erection of an assembly hall and the completion of buildings at the High School for Girls.

Lowther.—Efforts are being made to raise money for the erection of an institute for the parish.

Luton.—The T.C. have decided to erect another hundred houses.—A destructor is to be erected at the sewage farm.

Malton.—The building of a new hospital at Malton is estimated at about £16,000.

Malvern.—Worcester E.C. are inquiring as to land for the proposed new secondary school.

Manchester.—The Town-Planning Committee has received approval of a scheme for four new roads.

Merthyr Tydfil.—The Borough Architect is to report on sites for the erection of a workshop for the blind.—A joint report is to be prepared by the Borough Architect and B.S. for the establishment of a central depot, the canal site having been suggested for this purpose.—The Borough Architect has been instructed to prepare plans for 60 non-parlour houses at Dowlais and Cyfarthfa.

Newbury.—A town-planning scheme is proposed for the town and the parishes on the north in the rural district area.

Oldham.—Plans have been forwarded to the B.E., showing the proposed extension to be made at the Ascroft-street Technical School.

Oswaldtwistle.—The D.C. have placed a contract for the erection of 16 houses in Thwaites-road.

Oulton.—A new bridge is to be constructed across the new Leeds Ring road.

Pontefract.—The provision of a new vicarage for the Parish Church of All Saints' has proceeded a step further by the purchase of a new site, the Barbicon, in Southgate, by Messrs. Garside & Pennington, for the erection of a new vicarage more commensurate with present modified requirements, at an estimated cost of £2,500.

Preston.—The T.C. propose to repair Oxheys Bridge, at an estimated cost of £550; and drainage to the foundations of the bridge also to be carried out, at an estimated cost of £600.—The extensions to Preston Grammar School are about to be commenced.

Saltash (Cornwall).—The U.D.C. instructed the surveyor to prepare plans and specifications for a further 20 houses.

Sanderstead.—Commencement is to be made in the summer with the erection of a permanent church for St. Mary's. Plans are now being prepared by the architects, Messrs. Greenaway & Newberry. The cost of the first part of the church is estimated at £9,800.

Seaham Harbour.—A new Roman Catholic School to accommodate 300 children is to be built at Seaham Harbour, and a similar school to accommodate 250 infants, is to be built at Birtley. Messrs. Stienlet and Maxwell, of Newcastle, are the architects.—The Rev. Hoggarthy has in hand a scheme for erection of a senior R.C. school for 600 children.

Sefton.—The R.D.C. are formulating a comprehensive scheme of town planning, for which a public inquiry is to be held by the M.H.

Sherburn-in-Elmet.—Plans of the bacon factory proposed to be erected at Sherburn-in-Elmet by the Yorkshire Bacon Factory, Ltd., have been adopted by the management committee at their meeting. Tenders are to be invited immediately.

Shipley.—The U.D.C. has received M.H. sanction to borrow £5,500 for the erection of a smallpox hospital at Heaton Royd.

Sidmouth.—The U.D.C. are to borrow £3,000 for sea defence works.

Skegness.—Plans for a new convalescent home for the National Deposit Friendly Society have been adopted.

Stafford.—The C.C. has approved the plans and estimates for new offices.

Stamford.—The T.C. has decided to proceed with a housing scheme for the erection of 100 non-parlour type houses. A scheme has been adopted for the erection of a smallpox hospital at Shacklewell Hollow at an estimated cost of £3,000.

Stanley (West Yorks).—The U.D.C. has decided to erect 100 houses.

Stockport.—Messrs. Gough & Gurney have acquired as a housing estate a site on Parsonage-road, Heaton Moor, where they propose to erect a number of semi-detached brick-built houses.

Stourbridge.—Plans are to be prepared for a secondary school for girls on a site already acquired.—The B.E. have approved revised plans for class-room extensions at King Edward Grammar School, and when this scheme is completed the governors will prepare one for the extension of the Science buildings. The governors proposed the acquisition of the "Vine" Hotel, which adjoins the school property, at a cost of £1,550, to further enlarge the school and playground.

Surrey.—Local authorities are arranging to confer with the Ministry of Transport regarding the formation of a by-pass near Priests' Bridge, in order to secure an improvement of the Upper Richmond-road.

Swansea.—Plans passed by the T.C.: Ten garages rear of Gwydr-crescent, for H. Billings & Son; alterations and additions, Gower-street, for the Swansea and District Co-operative Society, Ltd.

Taunton.—The T.C. is to apply to the M.H. for consent to the appropriation of land abutting on the Lambrook-road for the erection of 100 houses. They also recommended that the Council give the Committee power to prepare for the erection of houses on the Wellington-road site. The Council are proposing to develop the Wellington-road site, and proceed with the erection of houses as soon as possible.

Tooting.—The trustees of St. Paul's propose the erection of a church at Furzedown.—Church-lane is to be improved at a cost of £715.

Trowbridge.—In connection with the housing scheme at the Charlotte-street site, the T.C. have decided to invite tenders for brick and concrete construction. Messrs. E. Linsey & Son are to erect 15 houses in Bradford-road. Plans passed: Church-house, Holy Trinity Church, for Mr. W. W. Snallum.

Wallsend.—The Rev. Toner is having plans prepared for the erection of a new R.C. school to provide accommodation for 700 children.

Wembley.—A complete redecoration, together with interior alterations on a large scale, are to be made to the pavilion at the Exhibition of the South African Government. The architects are Messrs. Lanchester, Lucas & Lodge.

Weymouth.—Schemes have been prepared by the Borough Surveyor of conveniences at the football ground, to cost £500, and at Nothe Walk, to cost £650.—The M.H. has sanctioned a loan of £18,760 for the erection by the T.C. of houses on the Westham estate. The Housing Committee propose the erection of a further 44 houses.

Whitley and Monkseaton.—The U.D.C. passed plans for a new Roman Catholic Church, to accommodate 700 persons, and a presbytery, to be erected upon a site at the corner of Park-avenue and Coquet-avenue, Whitley Bay.

Wolverley.—The governors of Selbright's Endowed School propose to proceed with the provision of a new elementary school and a special subjects centre.

Wombwell.—The West Riding C.C. has approved the plans of the proposed Middle School, in respect of which an estimate of £32,000 has already been approved. A detailed estimate as to the cost has been prepared by the Architect, and it is found necessary to put forward a supplemental estimate of £16,000.

Woodford.—The enlargement of the County High School for Girls is proposed.

Worcester.—The County E.C. have submitted plans to the B.E. for the improvement of schools at Flyford and Lickley End. The Committee are inquiring as to the need of more secondary school accommodation in various parts of the county.—The County E.C. are seeking loan sanction for £15,530 for a new elementary school at Hill and Cakemore; and £1,560 for improvements at Stoke Prior School.—Large engineering works are to be erected in Bromyard-road, for the Mining Engineering Co., Ltd., of Moorfields, Sheffield. The plans have been prepared by Messrs. Parker & Sons.

Yeadon.—Plans have been approved by the Governors of the Yeadon and Guiseley Secondary School for extensions to the existing buildings.

York.—The City Council are budgeting for an expenditure of £119,000 for housing and £42,000 for relief works.

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* See also our List of Contracts, Competitions, etc.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, at		Best Blue Pressed Staffs	9 5 0
King's Cross	2 13 3	Do. Bullnose ..	9 15 0
Do. grooved for plaster	2 15 3	Blue Wire Cuts	7 5 0
Do. Bullnose ..	3 8 3		

Best Stourbridge Fire brick:—

2½ in.	8 11 0	3 in.	10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers ..	23 0 0	D'ble Str'tch'rs	31 10 0
		D'ble Headers	28 10 0
		One Side and two Ends ..	32 10 0
		Two Sides and one End ..	33 10 0
Headers	22 10 0	Splays and Squints	31 0 0
Quoins, Bullnose and 4½in Flats	29 10 0		

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London

	s. d.		s. d.
2 in. per yd. super	1 11	3 in. per yd. super	2 9
2½ in. „	2 4	4 in. „	3 6

	s. d.		
Thames Ballast	10 6	per yd.	delivered 2 miles radius Paddington.
Pit Sand	13 9	„ „	
Thames Sand	14 6	„ „	
Best Washed Sand	14 6	„ „	
½ in. Shingle for Ferro-Concrete	12 9	„ „	
¼ in. „	14 0	„ „	
¼ in. Broken Brick"	11 6	„ „	
Pan Breeze	7 6	„ „	

Per ton delivered in London area in full van loads.

Best Portland Cement, British Standard Specification. Test £2 18 0 to £3 3 6 51s. alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above.....	0 10 0
Super Cement (Waterproof).....	4 8 0
Roman Cement	8 15 0
Parian Cement.....	5 15 0
Keene's Cement, White.....	5 15 0
„ „ Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
„ „ White	3 12 6
„ Fine	5 12 0
Sirapite, Coarse	3 9 0
„ Finish	3 17 0
Grey Stone Lime.....	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube....	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.....	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.....	4 4
Do. do. delivered on road wagons at above stations, per ft. cube.....	4 5
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.	
HOPTON-WOOD STONE—	
Delivered at any Goods Station, London.	
Small random blocks, up to 10 ft. cube. P. ft. cb.	7 0
Random blocks from 10 ft. and over „	17 0
Sawn two sides „	27 0
Sawn three or four sides..... „	32 0
YORK STONE, BLUE—*Robin Hood Quality.*	
Delivered at any Goods Station, London.	s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.) ..... Per ft. super	5 6
6 in. rubbed two sides, ditto..... „	6 0
3 in. sawn two sides slabs (random sizes) „	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) ..... „	1 6½
1½ in. to 2 in. ditto, ditto..... „	1 4
HARD YORK—	
Delivered at any Goods Station, London.	
Scappled random blocks ..... Per ft. cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.) ..... Per ft. super	5 1½
6 in. rubbed two sides ditto ..... „	6 1½
4 in. sawn two sides slabs (random sizes) „	2 10
3 in. ditto ditto „	2 1½
2 in. self-faced random flags .. Per yd. super	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 9	28 0	3 × 11	28 0
4 × 8	26 0	2 × 11	28 0
4 × 7	25 0	3 × 9	25 0
3 × 8	24 0	2½ × 9	25 0
3 × 7	23 0	3 × 4½	23 0
2½ × 7	22 0	3 × 4	23 0

PLANED BOARDS.

1 × 11	£32 0	1 | 9 ×	£30 0

WOOD

(continued).

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1¼	32/6
⅞	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.	Inches.	per sq.
1	25/-	¾	16/6
1¼	32/6	¾	20/-
1½	37/6	1	25/-

Inches.	BATTENS.	s. d.
¾ × 2	.....	2 6 per 100 ft.

SAWN LATHS.

Per bundle	0 2 4

Dry Wainscot Oak, per ft. super, as inch	0 2 0	to	0 2 6
¾ in. do. do.	0 1 6	to	0 2 0
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0 1 9	to	0 2 6
Cuba Mahogany	0 3 0	to	0 3 6
Teak (Rangoon, Moulmein or Java), per ft. cube..	0 14 0	to	—
American Whitewood planks, per ft. cube	0 12 0	to	0 14 0
Best Scotch glue, per cwt...	4 10 0	to	—
Liquid Glue, per cwt.	4 7 0	to	5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

	Per 1,000 f.o.r. London. £ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) { Hand-made	0 9 6
Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &C., TO LONDON STATION PER TON—

	£ s. d.
R.S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
„ Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.
To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	16 10 0	⅝ in. to ½ in. ...	13 10 0
⅜ in.	14 10 0	⅝ in. to 2½ in...	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Tubes. Sizes ⅛" to 6"	Fittings. ¼" & under.	Fittings. ¼" to 6" over	Flanges. ¼" & under.	Flanges. ¼" to 6" over
Black Gas ..	55 %	..47½%	..50%	..57½% ..60%
Blue Water	50 %	..42½%	..45%	..52½% ..55%
Red Steam	45 %	..37½%	..40%	..47½% ..50%
Galv'd Gas ..	40 %	..37½%	..40%	..47½% ..50%
„ Water	33⅓%	..32½%	..35%	..42½% ..45%
„ Steam	27½%	..27½%	..30%	..37½% ..40%

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/2½	11½d.	3½d.
3½ in.	1/4	1/0½	3½d.
4 in.	1/5	1/2½	3½d.
4½ in.	1/6½	1/4	4½d.
5 in.	1/9½	1/5½	5½d.

O.G. GUTTERS.

3 in.	1/7	1/3½	3½d.
3½ in.	1/7	1/3½	3½d.
4 in.	1/8½	1/4	3½d.
4½ in.	1/10½	1/6½	4½d.
5 in.	2/3	1/9½	5½d.

RAIN-WATER PIPES, &C.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/9½	1/2½	1/8½
2½ in. „	1/11½	1/4	2/0½
3 in. „	2/4½	1/8	2/6
3½ in. „	2/10	2/-	2/10½
4 in. „	3/3	2/4½	3/6

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches, stock angles. s. d.
2 in. per yd. in 6fts. plain	2 11	2 3	2 9
2½ in. „	5	2 6	3 5
3 in. „	4 1	2 9	4 0½
3½ in. „	4 5½	3 5	4 8½
4 in. „	4 11½	3 9½	5 5½

L.C.C. COATED DRAIN PIPES—London Prices ex Works.

	Pipe. s. d.	Bends, stock angles. s. d.	Branches stock angles. s. d.
3 in. per yd. in 9ft. lengths	4 3	5 9	7 8
4 in. „ „	6 3	6 11	9 6
5 in. „ „	7 10	12 0	16 3
6 in. „	9 6	15 0	20 9

Gasken for jointing, 38/6 per cwt.

	Per ton in London. £ s. d.		£ s. d.
IRON—			
Common Bars	13 10 0	to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 10 0	..	15 10 0
Staffordshire "Marked Bars"	17 0 0	..	18 0 0
Mild Steel Bars.....	12 0 0	..	13 0 0

METALS (*Continued*).

	£ s. d.		£ s. d.
Steel Bars, Ferro-Concrete quality, basis price	12 0 0	..	13 0 0
Hoop iron, basis price	16 0 0	..	17 0 0
„ Galvanised	31 0 0	..	32 0 0
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g..	14 10 0	..	15 10 0
„ „ „ 24 g.	15 10 0	..	16 10 0
„ „ „ 26 g..	17 10 0	..	18 10 0
Sheets Flat Best Soft Steel, C.R. & C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g..	20 0 0	..	22 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g.. and 24 g.....	22 0 0	..	23 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g..	24 0 0	..	26 0 0
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.....	19 10 0	..	20 10 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	20 0 0	..	21 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.....	23 0 0	..	24 0 0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker ...	22 10 0	..	23 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	..	26 10 0
Best Soft Steel Sheets, 26 g.	26 0 0	..	27 0 0
Cut Nails, 3 in. to 6 in...	20 10 0	..	22 0 0

(under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up.....	48 10 0
Pipe in coils	49 0 0
Soil Pipe	52 0 0
Compo pipe	53 0 0

NOTE—Country delivery, 30s. per ton extra; lots under 3 cwt., 2s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.

Old lead, ex London area, at Mills..... per ton	34	0 0	—
Do., ex country, carriage forward ..... per ton	35	0 0	—

COPPER.

		s. d.
Seamless Copper tubes (basis).....	per lb.	1 1½
Strong sheet.....	„	2 3
Thin	„	2 4
Copper nails	„	2 3
Copper wire	„	2 4

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
7/6	11/-	17/-	29/-	36/-	63/- per doz.

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.

¼ in.	¾ in.	1 in.	1¼ in.	1½ in.	
35/-	56/-	98/-	162/-	228/-	per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

	1½ in.	1¾ in.	2 in.	3 in.	
8 lbs. P. traps ..	33/-	41/-	56/-	101/-	per doz.
8 lbs. S traps ..	35/-	45/-	66/-	126/-	„

TIN—English Ingots, 2/6 per lb. SOLDER—Plumbers' 1/3, Tinmen's 1/5, Blowpipe 1/6 per lb.

PAINTS, &c.

	£ s. d.
Raw Linseed Oil, in pipes .... per gallon	0 4 4
„ „ „ in barrels .... „	0 4 6
„ „ „ in drums .... „	0 4 9
Boiled „ „ in barrels .... „	0 4 9
„ „ „ in drums .... „	0 5 0
Turpentine in barrels ..... „	0 5 9
„ in drums (10 gall.).. „	0 6 0
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	58 5 0

GENUINE WHITE LEAD PAINT—
"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Spedol," "Polacco" and other best brands (in 14 lb. tins) not less than 5 cwt. lots..... per ton delivered 79 5 0

Red Lead, Dry (packages extra)....per ton	56	0 0
Best Linseed Oil Putty.....per cwt.	0	15 0
Filocol ..... „	0	15 6
Size. XD Quality ..... ftkn.	0	3 6

Continued on next page.

* The information given on this page has been specially compiled for THE BUILDER and is copyright. Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths ..	3½d.	32 oz. fourths	8½d.
15 „ thirds	4½d.	32 „ thirds	10½d.
21 „ fourths ..	5d.	Obscured Sheet, 15 oz.	4d.
21 „ thirds	6½d.	„ „ 21 „	5½d.
26 „ fourths ..	6d.	Fluted 15oz. 6½d., 21oz.	9½d.
26 „ thirds	7½d.	En'lied 15oz. 5½d., 21 oz	7½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
⅛ Rolled plate	4½d.
⅛ Rough rolled	5½d.
¼ Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish white..	6½d.
Ditto, tinted	9d.
Rolled Sheet	6d.
White Rolled Cathedral	5½d.
Tinted do.	7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

		Per gallon. £ s. d.
Oak Varnish	Outside	0 14 0
Fine ditto	ditto	0 16 0
Fine Copal	ditto	0 18 0
Pale Copal	ditto	1 0 0
Pale Copal Carriage	ditto	1 4 0
Best Ditto	ditto	1 12 0
Floor Varnish	Inside	0 18 0
Fine Pale Paper	ditto	0 18 0
Fine Copal Cabinet	ditto	1 2 6
Fine Copal Flatting	ditto	1 0 6
Hard Drying Oak	ditto	0 18 0
Fine Hard Drying Oak	ditto	0 19 0
Fine Copal Varnish	ditto	1 0 0
Pale ditto	ditto	1 2 0
Best ditto	ditto	1 12 0
Best Japan Gold Size		0 10 0
Best Black Japan		0 10 6
Oak and Mahogany Stain (water)		0 12 0
Brunswick Black		0 7 6
Berlin Black		0 14 6
Knotting (patent)		1 5 0
French and Brush Polish		0 17 0
Liquid Dryers in Terebine		0 9 0
Cuirass Black Enamel		0 7 0

CERTIFIED CARPENTERS

FORMED in 1890 with the object of raising the standard of craftsmanship in carpentry and to provide a means of social intercourse between those engaged in the trade, the Incorporated British Institute of Certified Carpenters has had a successful and useful career, and is becoming of increasing value to its members. The membership is composed both of carpenters working at their trade and instructors in carpentry at technical institutes, and to become a member it is necessary to hold a certificate given after examination by the Worshipful Company of Carpenters.

Recently, at Pritchard's Restaurant, Oxford-street, Mr. J. Hutton Freeman, Clerk of the Worshipful Company of Carpenters, occupied the chair at the annual dinner of the Institute, when a large number of members and guests were present.

In proposing the toast of "The Institute," Mr. Blackborow referred to the very practical nature of the Carpenters' Company's examination, and expressed the opinion that it might be advisable if the Institute were allowed to act on the Examining Board. He also mentioned that some of the members of the Institute were studying architecture, and recommended this as a subject which would be of the greatest use to the practical carpenter.

In responding, Mr. Luxton said that all the members of the Institute were skilled craftsmen, and they were now developing the scientific side of the craft, and were encouraging young men to take an interest in the various aspects of carpentry and joinery which would probably be ignored otherwise.

Mr. Ayres expressed the opinion that the Carpenters' Company's school at Tufton-street was second to none in the country; it set out to produce craftsmen, and did it excellently, and the school had some of the finest lecturers and teachers one could wish for.

Mr. Freeman, responding to the toast of "The Worshipful Company of Carpenters," said the formation of the Institute was a happy idea; it had been a great success, and the Carpenters' Company was very much interested in it.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*. † Denotes *provisionally accepted*.
§ Denotes *accepted subject to modifications*.
‡ Denotes *recommended for acceptance*.

AYLESBURY.—26 non-parlour houses, for the T.C. :—

*Meliser & Connor, Aylesbury £12,178

BENTLEY.—For erection of 50 houses in pairs, at Arksey, for the U.D.C. :—

*Archer Hall, Arksey: £949 10s. per pair. £926 per pair.

BRADFORD.—Reconstruction of warehouse and offices at bottom of Leeds-road, for Angus Rhodes & Co. :—

**Mason*—Chas. Booth & Son.
**Joiner*—Wilkinson & Dawson, Ltd.

BRENTFORD.—Partial covering of market stands, for the U.D.C. :—

*F. G. Cressey, Ltd. £130

DEVON.—Repairs to embankment on the Exeter-Okehampton main road, for the C.C. :—

*Berry & Vincent..... £484

GLASGOW.—Chimney stack at Bellefield Sanatorium, for the T.C. :—

‡W. Taylor & Son, Glasgow, Ltd..... £1,392 15

GLASGOW.—Fencing at (*a*) Bellahouston-park, along Mosspark Boulevard, and (*b*) Newlands-park, for the T.C. :—

‡(*a*) J. Robertson & Co. £1,190 6 4
‡(*b*) J. Robertson & Co. 952 17 3

GLASGOW.—Houses at Possil, for the T.C. :—

‡*Mason work*—Brown, Fraser & Co..... £36,804 2 8
‡*Joiner work*—Matthew Braid & Sons 27,216 6 6
‡*Glazier work*—A. S. Wright & Co..... 710 12 7
‡*Slater work*—P. White & Co. .. 8,719 3 1
‡*Plumber work*—M'Culloch & Giffen..... 18,515 11 4
‡*Plaster work*—H. S. Bathgate.. 5,833 8 11
‡*Painter work*—A. & G. Laird .. 1,951 6 7
‡*Iron railings*—A. Peters, Ltd... 838 0 2

GLASGOW.—296 houses at Balornock, for the T.C. :—

‡*Mason work*—G. Stewart £64,185 0 3
‡*Joiner work*—Ritchie & Anderson 30,183 17 3
‡*Glazier work*—Scottish National Glass & Glazing Co., Ltd. 1,084 5 10
‡*Slater work*—W. Walker & Sons 8,973 0 3
‡*Plumber work*—W. Sievewright & Son's..... 23,307 5 3½
‡*Plaster work*—W. Reid & Sons 9,336 11 4
‡*Painter work*—A. & G. Laird .. 2,284 9 0½
‡*Iron railings*—P. & R. Fleming & Co..... 1,943 8 9

GLASGOW.—Plumbing work at Mearnskirk Sanatorium, for the T.C. :—

‡A. Anderson, Ltd. £20,253 2 10

GREASBOROUGH.—For erection of (*a*) 18 houses at Potter's Hill, and (*b*) 12 houses at Potter's Hill, for the U.D.C. :—

*(*a*) R. Snell & Sons: "B" type, at £458 per house.
*(*b*) Thomason & Co.: "C" type, at £471 per house.

GRIMSBY.—Children's shelter, dressing rooms, &c., at the Corporation-road Recreation Ground, for the C.B. :—

*C. East..... £932 4

GRIMSBY.—Public conveniences in Corporation-road, for the C.B. :—

*Hewins & Goodhand..... £485 10

GRIMSBY.—For wrought iron fencing at the (*a*) Corporation-road Recreation Ground, and (*b*) the Barrett Recreation Ground Extension, for the C.B. :—

‡C. & C. Wright, Ltd..... (*a*) £386 13 6
(*b*) 660 0 6

LONDON.—Accepted tenders for building work for H.M.O.W. :—Beaconsfield Post Office, &c.—Erection: Y. J. Lovell & Son, Gerrard's Cross. Masonry: E. Harris, High Wycombe. Bolton Old Post Office—Adaptations: J. Johnson & Son, Wigan. Brighton Sorting Office—Slating, &c. : E. Matthews & Co., London, W.C. Steel Roof Trusses: Redpath, Brown & Co., Ltd., London, E.C. Broadmoor Asylum—Plumbing: W. Freer, Leicester. Burslem Telephone Exchange—Erection: Stephen Heath & Son, Newcastle, Staffs. Crewe Station Post Office—Erection of garage, &c. : J. Williams & Sons, Crewe. Crowborough Post Office, &c.—Erection: R. Cook & Sons, Ltd., Crawley. Dollis Hill Post Office Research Station—Erection of Laboratory: Winter & Ward, Harpenden. Gateshead Sorting Office—Slating: Dawber, Townsley & Co., Ltd., Darlington. Hampton Court—Alterations, &c., to lavatories: Douglass, Halse & Co., Ltd., London, S.E. Harrogate Head Post Office—Adaptations: W. W. Stott, Harrogate. Kensington (South), S.W., Victoria and Albert Museum—Erection of Workshops: John Garlick (1910), Ltd., London, S.W. King George V Dock Pierhead—Erection of Customs Waterguard Office: Arthur Logan, London, S.W. Leeds, Ministry of Pensions Hospital—Erection: H. Atkinson & Sons, Ltd., Leeds. Steelwork: Frodingham Iron and Steel Co., Ltd., Scunthorpe. Llangefni Post Office—Joinery: Jacob Smith, Ltd., Loughborough. Steel Trusses: Henderson & Glass, Liverpool. Ludlow Post Office, &c.—Erection: W. F. Drew, Ltd., Chalford. Maida Vale Telephone Exchange—Alterations, &c.: W. J. Maddison, Ltd., London, E. Steelwork: Dorman, Long & Co., Ltd., London, S.W. Oldham Sorting Office—Erection of garage, &c.: Samuel Ashton (Oldham), Ltd. Openshaw Sorting Office, &c.—Painting: Daniel Lea, Manchester. Primrose Hill—Extensions to Convenience, &c.: T. Millman, Ltd., London, W. Southampton-row P.O., W.C.—Adaptations: A. Roberts & Co., Ltd., London, W. Todmorden P.O.—Carpenter and Joiner: Halstead Bros., Eastwood. Painter: Latham Bros., Burnley. Plasterer and Slater: Tillotson, Blacka & Son, Todmorden. Steelwork: Joseph Webb & Sons, Ltd., Bury. "Western" Telephone Exchange—Plastering: Veronese (Concrete Stone Co., Ltd., London, S.W.

(*Continued on p. 514.*)

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur :—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Brick-layers' Labourers.	Plas-terers' Labourers.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/7	1/0½	
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3	
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½	
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½	
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3	
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/3 to 1/3	
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-	
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½	
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Dumfries	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2	
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3	
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½	
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2	
Galashiels	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6	1/2	
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½	
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Hawick	1/6	1/6	1/6	1/6–1/6½	1/6	1/6	1/6	1/2	
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	
Inverness	1/5	—	1/5	1/4	1/5	1/5	1/4	1/- to 1/2	
Kilmarnock	1/8	1/3	1/8	1/9	1/8	1/8	1/8	1/3½	
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/	
Lanark	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/- to 1/3	
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½	
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½	
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3	
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½	
Stirlingshire (Eastern District)	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½	
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½	

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	32	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	8	6
½ inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and sill labour fixed	" "	10	6
Portland stone fixed	" "	20	0

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
Do. trusses	" "	8	6

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		44/6	53/-	60/6
Do. tongued and grooved	"		49/-	57/6	65/-
Do. matchings	"	45/-	51/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights: average size	" "	3	9

DOORS.		1½"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/9
Add if cross tongued	"	2d.	2d.	2d.

STAIRCASES.

		1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets		2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed		1/8	2/	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail; average 3 in. × 3 in.	" "	6	0
Add if ramped	" "	11	10
Add if wreathed	" "	23	9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roof work	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	"	1/9	2/-	2/6	3/3
Rain-water pipes with ears	"	1/9	2/7		
Extra for shoes and bends	each	4/4	5/11		
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	64	0
Do. Do. in flats	"	63	0
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft. run.	0	6
Soldered seam	" "	1	6
Copper nailing	" "	0	6

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/0	3/4	4/0	
Do. service	"	1/8	2/2	2/7	3/10		
Do. soil	"						6/9
Bends in lead pipe	each					3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"				14/7	19/6	
Bib cocks and joints	"	6/4	9/7	15/4	41/-		
Stop cocks and joints	"	15/4	17/2	25/8	64/-		

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	4
Do. Do. Sirapite	" "	2	7
Do. Do. Keen's	" "	3	7
Add sawn lathing	" "	1	7
Add metal lathing	" "	2	6
Portland cement screed	" "	2	2
Do. plain face	" "	3	3
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	9

GLAZIER.

		s.	d.
21 oz. sheet plain	per foot sup.	0	8
26 oz. Do	" "	1	0
Obscured sheet	" "	1	1
¼ in. rolled plate	" "	0	9
¼ in. rough rolled or cast plate	" "	0	10½
¼ in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting 1 coat	" "	0	9
Do. 2 coats	" "	1	3
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece 2/—to 4/		

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TENDERS—*(Continued from page 512.)*

LONDON.—For conversion of Salisbury Hotel into a temporary police station, for the City Corporation :—

Ashby & Horner, Ltd.	£7,428
J. Mowlem & Co., Ltd.	7,230
Trollope & Colls, Ltd.	6,148
‡J. Greenwood, Ltd.	5,683
W. Lawrence & Son, Ltd.	5,644

LONDON.—Accepted tenders for H.M. War Office:—

Hounslow Barracks—Electric Light: The Alpha Electrical and Manufacturing Co., London, S.W.

Chatham, Brompton Barracks—Installation of Electric Light: T. Clarke & Co., Ltd., London, S.W.

Kneller Hall, Twickenham—T. Clarke & Co., London, S.W.

Lichfield, Whittington Barracks—Electric Lighting: S. Dixon & Son, Ltd., Leeds.

LONDON.—Supply of sewer ironwork for the Hackney B.C. :—

F. Bird & Co.	£607 6 6
Dover Engineering Works, Ltd.	666 2 6
Messenger & Co., Ltd.	635 9 0
A. C. Woodrow & Co.	585 3 3
*J. Gibb & Co., Ltd.	515 0 0

LONDON.—Additional lavatory accommodation at the joint church at the cemetery, East Finchley for the Islington B.C. :—

The Art Building and Decorating Co., Hendon, N.W.4	£360 0
James Colville 35, Lancaster-road, S.W.19	270 0
‡Stevens & Sons, 14, Muswell Hill-road, N.5	264 9

LONDON.—Paving works required in connection with the widening of the Strand, between Durham House-street and No. 55, for the Westminster City Council :—

F. G. Minter	£4,917 0 0
W. Griffiths & Co., Ltd.	3,421 3 9
A. Thomson & Co., Ltd.	3,255 8 9
Improved Wood Pavement Co., Ltd.	3,238 7 6
Acme Flooring and Paving Co., Ltd.	3,137 12 9
G. J. Anderson	3,094 10 0
‡J. Mowlem & Co., Ltd.	2,978 7 6

LONDON.—For re-wiring &c., the electric light system at the First-class Swimming Bath, Buckingham Palace-road, for the Westminster City Council :—

White & Mantle, Ltd.	£250
Buchanan & Curwen	239
Drake & Gorham, Ltd.	233
H. E. Keen & Co., Ltd.	228
Belshaw & Co., Ltd.	225
*Coleby & Co.	210

MERTHYR TYDFIL.—Heating installation at the Workhouse, for the B.G. :—

*G. N. Hedon, Cowbridge £7,547

MORECAMBE.—Alterations, extensions and improvements to the harbour conveniences, for the T.C. :—

*Hillman & Sons.

MORLEY.—Concert hall at Ackroyd-street Working Men's Club. Messrs. T. A. Buttery & Son, architects, Queen-street :—

Excavator, Mason and Bricklayer—	
*F. Turner, Morley	£1,726 11 0
Carpenter and Joiner—	
*C. Chew, Morley	629 10 6
Plumber and Glazier—	
*A. Fawcett & Son, Morley	313 0 0
Plasterers—	
*J. Iredale & Son, Gomersal	120 0 0
Slater—	
*J. Kellett, Hungerhill, Morley	143 5 0

OLDBURY.—Secondary school and caretaker's house, for the Worcester E.C. :—

*W. Jackson, Langley Green, nr. Birmingham £30,000

OLDBURY.—Extensions to the Rood End Council Schools, for the E.C. :—

*W. Cooper & Son, Blackheath £5,358

PRESTON.—202 houses in Mellor-road, Arterial road, and Ribbleton-avenue :—

*Silwood, Lloyd & Co., Ltd., Birkenhead £94,852 9 6

ROCHDALE.—Coal store at the Gas Works, for the Gas and Electricity Board :—

*Woodall, Duckham & Co., Manchester.

RUSHMERE.—Alteration and additions to "The Greyhound" Inn, for Messrs. Steward & Patteson, Ltd. Messrs. F. W. Skipper & Son, A.R.I.B.A., architects and surveyors, 55, London-street, Norwich :—

J. Noller	£2,059 0
Cubitt & Gotts	1,975 0
Fisk & Co.	1,925 0
E. Catchpole & Sons, Ltd.	1,842 0
*H. Keeble	1,653 3

STOKE NEWINGTON.—Repairs to Council houses in Milton-road and Church-walk, for the B.C. :—

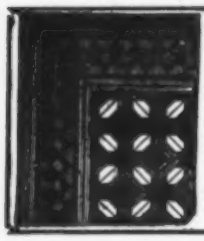
‡J. Thompson & Son £240

SOUTHEND-ON-SEA.—Groundsman's house in connection with the Jones Memorial Recreation Ground, for the C.B. :—

*Johns Bros. £725

WILLESDEN.—Baths and washhouses in Disraeli-road, for the U.D.C. :—

‡W. E. Ellis, Walthamstow £999



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